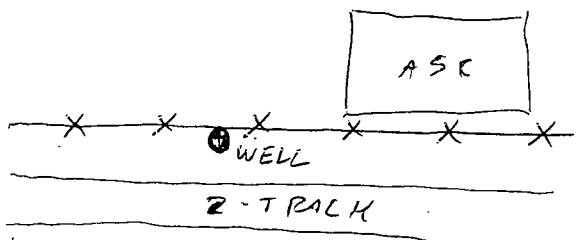


ASR-MW-5

9/17/97
CNS

WELL INTEGRITY INFORMATION FORM

- Is the well locked? YES - NAD TO CUT - BHE WILL REPLACE
- What is the condition of the protective casing? NONE - PVC RISER ONLY
- Does the well have an identification label on it? NO - "5" ON CAP
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? NO
- Are there any cracks or settlement in the concrete cap (if present)? NO
- Is there any soil washouts or ground depressions around the well? NO
- What is the organic vapor reading on the well riser pipe? 0 w/PID
- Record depth to water. 9.47'
- Are there any immiscible layers? NO LNAPL OR DNAPL
- Record depth to bottom of well. 39.91
- Is the bottom hard or silted? SOFT (SILTED)
- Compare field observations to well construction log if available. _____



WELL INTEGRITY INFORMATION FORM

- Is the well locked? YES - HAD TO CUT - BHE REPLACED
- What is the condition of the protective casing? GOOD
- Does the well have an identification label on it? "MW-8"
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? NO
- Are there any cracks or settlement in the concrete cap (if present)? NO
- Is there any soil washouts or ground depressions around the well? YES, SOIL IS A FEW INCHES BELOW CONCRETE, (LEVEL GROUND)
- What is the organic vapor reading on the well riser pipe? 0.0 w/PID
- Record depth to water. 7.27'
- Are there any immiscible layers? NO LNAPIR OR DNAPL
- Record depth to bottom of well. 37.5'
- Is the bottom hard or silted? HARD
- Compare field observations to well construction log if available. _____

WELL INTEGRITY INFORMATION FORM

11/20/97
TCS / M. M. M. RIL
LC1-1
(MW1)

- Is the well locked? no
- What is the condition of the protective casing? no protective casing
- Does the well have an identification label on it? no
- Does the well have any discharge or electrical conduits attached to it? no
- Is there any evidence of visual damage or tampering? no
- Are there any cracks or settlement in the casing seal? no
- Are there any cracks or settlement in the concrete cap (if present)? none
- Is there any soil washouts or ground depressions around the well? no
- What is the organic vapor reading on the well riser pipe? 0.0 ppm
- Record depth to water. 6.12'
- Are there any immiscible layers? no
- Record depth to bottom of well. 15.81' 14.81' RS
- Is the bottom hard or silted? silted
- Compare field observations to well construction log if available. OK

WELL INTEGRITY INFORMATION FORM

11/20/97
TCS/RJK
LCI-2

- Is the well locked? no
- What is the condition of the protective casing? no protective casing
- Does the well have an identification label on it? no
- Does the well have any discharge or electrical conduits attached to it? no
- Is there any evidence of visual damage or tampering? cap is gone
- Are there any cracks or settlement in the casing seal? yes - loose, not even a seal, heaved, cracked
- Are there any cracks or settlement in the concrete cap (if present)? no
- Is there any soil washouts or ground depressions around the well? yes
- What is the organic vapor reading on the well riser pipe? 0.0 ppm
- Record depth to water. 7.35'
- Are there any immiscible layers? no
- Record depth to bottom of well. 17.75'
- Is the bottom hard or silted? silted
- Compare field observations to well construction log if available. OIC

WELL INTEGRITY INFORMATION FORM

- Is the well locked? NO
- What is the condition of the protective casing? no protective casing
- Does the well have an identification label on it? NO
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? yes - broken
- Are there any cracks or settlement in the casing seal? yes - no seal, pipe is loose
- Are there any cracks or settlement in the concrete cap (if present)? yes
- Is there any soil washouts or ground depressions around the well? yes
- What is the organic vapor reading on the well riser pipe? 0.0 ppm
- Record depth to water. 3.23'
- Are there any immiscible layers? NO
- Record depth to bottom of well. 13.27
- Is the bottom hard or silted? yes - slightly silted
- Compare field observations to well construction log if available. OK

WELL ID CL1-1

AREA: 1

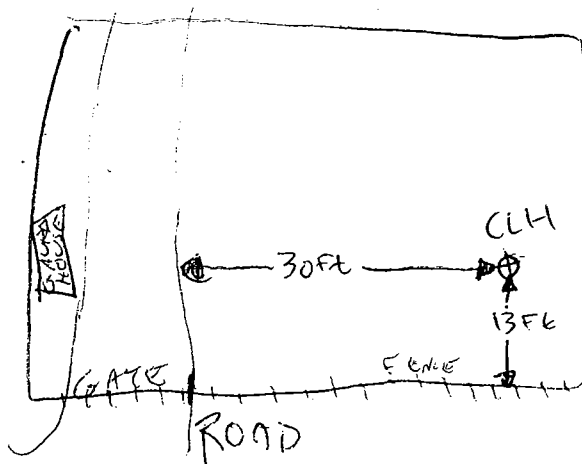
WELL INTEGRITY INFORMATION FORM

INSPECTOR: STR/CMJ
DATE 9-2-97
TIME 18:20

- Is the well locked? YES / 2251 M. LOCK CUTOFF FOUND ON GROUND NEAR WELL / NEW LOCK DIFFERENT KEY PLACED ON WELL CAP.
- What is the condition of the protective casing? PAINTED YELLOW / FEW RUSTY SPOTS SOLID APPROX 80 CM STICKUP
- Does the well have an identification label on it? YES 7 (PAINTED)
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? CANNOT SEE SEAL GRAVEL ON SURFACE NEAR/AROUND WELL TO PROTECTIVE CASING
- Are there any cracks or settlement in the concrete cap (if present)? NO CON. CAP
- Is there any soil washouts or ground depressions around the well? NO
- What is the organic vapor reading on the well riser pipe? _____
- Record depth to water. 36.39 READING FROM SOUTH SIDE
- Are there any immiscible layers? NO
- Record depth to bottom of well. 60.47
- Is the bottom hard or silted? HARD
- Compare field observations to well construction log if available. _____

PICTURE 15/24 FUSC 1

9-2-97
STR
MC
NOT TRAINED ON
9-2-97 BECAUSE
ACCESS NOT POSSIBLE
DUE TO DIFFERENT
LOCK.
STR
9-2-97



SWI-1

WELL INTEGRITY INFORMATION FORM

10/21/97 SWI-1
TCS mmm

- Is the well locked? yes
- What is the condition of the protective casing? good
- Does the well have an identification label on it? yes
- Does the well have any discharge or electrical conduits attached to it? no
- Is there any evidence of visual damage or tampering? no
- Are there any cracks or settlement in the casing seal? no
- Are there any cracks or settlement in the concrete cap (if present)? no
- Is there any soil washouts or ground depressions around the well? no
- What is the organic vapor reading on the well riser pipe? 5.4 ppm
- Record depth to water. 9.92'
- Are there any immiscible layers? none
- Record depth to bottom of well. 40.3
- Is the bottom hard or silted? hard, some silt
- Compare field observations to well construction log if available. _____

SW1-2

WELL INTEGRITY INFORMATION FORM

SW1-2
10/21/97
KCS mm

- Is the well locked? yes
- What is the condition of the protective casing? good
- Does the well have an identification label on it? yes
- Does the well have any discharge or electrical conduits attached to it? no
- Is there any evidence of visual damage or tampering? no
- Are there any cracks or settlement in the casing seal? no
- Are there any cracks or settlement in the concrete cap (if present)? no
- Is there any soil washouts or ground depressions around the well? no
- What is the organic vapor reading on the well riser pipe? 0.4 ppm
- Record depth to water. 5 TCS 9.89'
- Are there any immiscible layers? no LNAPL / no DNAPL
- Record depth to bottom of well. 32.25'
- Is the bottom hard or silted? hard
- Compare field observations to well construction log if available.

WELL INTEGRITY INFORMATION FORM

SW1-3
TCS/mm M
10/23/97

- Is the well locked? yes
- What is the condition of the protective casing? good
- Does the well have an identification label on it? yes
- Does the well have any discharge or electrical conduits attached to it? no
- Is there any evidence of visual damage or tampering? no
- Are there any cracks or settlement in the casing seal? no
- Are there any cracks or settlement in the concrete cap (if present)? no
- Is there any soil washouts or ground depressions around the well? no
- What is the organic vapor reading on the well riser pipe? 27.1 ppm (background 12.2 ppm)
- Record depth to water. 14.13'
- Are there any immiscible layers? no LNAPL/DNAPL
- Record depth to bottom of well. 36.55'
- Is the bottom hard or silted? yes
- Compare field observations to well construction log if available. _____

WELL INTEGRITY INFORMATION FORM

SW1-4

TCS/ M M M

10/22/97

- Is the well locked? yes
- What is the condition of the protective casing? good
- Does the well have an identification label on it? yes
- Does the well have any discharge or electrical conduits attached to it? no
- Is there any evidence of visual damage or tampering? no
- Are there any cracks or settlement in the casing seal? no
- Are there any cracks or settlement in the concrete cap (if present)? no
- Is there any soil washouts or ground depressions around the well? no
- What is the organic vapor reading on the well riser pipe? 26.7 ppm (background)
- Record depth to water. 10.91 22.1 ppm
- Are there any immiscible layers? no LNAPL/DNAPL
- Record depth to bottom of well. 44.66
- Is the bottom hard or silted? hard
- Compare field observations to well construction log if available. _____

WELL INTEGRITY INFORMATION FORM

- Is the well locked? yes
- What is the condition of the protective casing? good
- Does the well have an identification label on it? yes
- Does the well have any discharge or electrical conduits attached to it? no
- Is there any evidence of visual damage or tampering? no
- Are there any cracks or settlement in the casing seal? no
- Are there any cracks or settlement in the concrete cap (if present)? no
- Is there any soil washouts or ground depressions around the well? no
- What is the organic vapor reading on the well riser pipe? _____
- Record depth to water. 10.27'
- Are there any immiscible layers? no UNAPL/DNAPL
- Record depth to bottom of well. 41.6'
- Is the bottom hard or silted? hard
- Compare field observations to well construction log if available. _____

WELL INTEGRITY INFORMATION FORM

SWI-6
10/22/97
TCS

- Is the well locked? yes
- What is the condition of the protective casing? good
- Does the well have an identification label on it? yes
- Does the well have any discharge or electrical conduits attached to it? no
- Is there any evidence of visual damage or tampering? no
- Are there any cracks or settlement in the casing seal? no
- Are there any cracks or settlement in the concrete cap (if present)? no
- Is there any soil washouts or ground depressions around the well? no
- What is the organic vapor reading on the well riser pipe? 84.0 ppm (21.0 ppm background)
- Record depth to water. 10.49
- Are there any immiscible layers? no DNAPL/LNAPL
- Record depth to bottom of well. 19.05
- Is the bottom hard or silted? hard
- Compare field observations to well construction log if available. _____

WELL INTEGRITY INFORMATION FORM

SWI-7
TCS/MMM
10/22/97

- Is the well locked? yes
- What is the condition of the protective casing? good
- Does the well have an identification label on it? yes
- Does the well have any discharge or electrical conduits attached to it? no
- Is there any evidence of visual damage or tampering? no
- Are there any cracks or settlement in the casing seal? no
- Are there any cracks or settlement in the concrete cap (if present)? no
- Is there any soil washouts or ground depressions around the well? no
- What is the organic vapor reading on the well riser pipe? 0.0 ppm
- Record depth to water. 11.20
- Are there any immiscible layers? no LNAPL/DNAPL
- Record depth to bottom of well. 36.5
- Is the bottom hard or silted? yes-hard
- Compare field observations to well construction log if available. _____

9/19/97
AW/JD.

Dartron B-1
WELL INTEGRITY INFORMATION FORM

- Is the well locked? bolted ; lock present but broken
- What is the condition of the protective casing? intact, but actual well cap is loose
- Does the well have an identification label on it? No
- Does the well have any discharge or electrical conduits attached to it? No
- Is there any evidence of visual damage or tampering? No
- Are there any cracks or settlement in the casing seal? No
- Are there any cracks or settlement in the concrete cap (if present)? No
- Is there any soil washouts or ground depressions around the well? No
- What is the organic vapor reading on the well riser pipe? Ø
- Record depth to water. (south side) 5.47'
- Are there any immiscible layers? No
- Record depth to bottom of well. 20.34'
- Is the bottom hard or silted? hard
- Compare field observations to well construction log if available. _____

- well cap doesnt fit tight
- replaced lock

Dartton B-2
WELL INTEGRITY INFORMATION FORM

9/19/97
AW/J.D

- Is the well locked? No
- What is the condition of the protective casing? poor - lid is missing
and casing is rusted, bent - only got cap off with much work
- Does the well have an identification label on it? No
- Does the well have any discharge or electrical conduits attached to it? No
- Is there any evidence of visual damage or tampering? yes; something
bent, damaged and broke the entire casing
- Are there any cracks or settlement in the casing seal? yes
- Are there any cracks or settlement in the concrete cap (if present)? yes; cracked
& broken
- Is there any soil washouts or ground depressions around the well? No
- What is the organic vapor reading on the well riser pipe? 0
- Record depth to water. (south side) 5.55'
- Are there any immiscible layers? No
- Record depth to bottom of well. 25.32'
- Is the bottom hard or silted? hard
- Compare field observations to well construction log if available. _____

Dartron B-3
WELL INTEGRITY INFORMATION FORM

9/19/97
Anne Warber
Jamie Dickson

- Is the well locked? No
- What is the condition of the protective casing? broken off ~~at~~ below ground level - no cap; covered w/ rocks/sticks
- Does the well have an identification label on it? No
- Does the well have any discharge or electrical conduits attached to it? No
- Is there any evidence of visual damage or tampering? Yes; Everything is broken off and gone
- Are there any cracks or settlement in the casing seal? Yes - practically missing
- Are there any cracks or settlement in the concrete cap (if present)? No cap present; no concrete anywhere; open to air
- Is there any soil washouts or ground depressions around the well? The ground surrounding the well is depressed all around the well
- What is the organic vapor reading on the well riser pipe? _____
- Record depth to water. southside 4.45' SWL
- Are there any immiscible layers? No
- Record depth to bottom of well. ~~20.1'~~ 22.10'
- Is the bottom hard or silted? soft, silted
- Compare field observations to well construction log if available. _____

Dartron B-4

9/19/97
AW/JD

WELL INTEGRITY INFORMATION FORM

- Is the well locked? bolted ; locked
- What is the condition of the protective casing? intact
- Does the well have an identification label on it? No
- Does the well have any discharge or electrical conduits attached to it? No
- Is there any evidence of visual damage or tampering? No
- Are there any cracks or settlement in the casing seal? No
- Are there any cracks or settlement in the concrete cap (if present)? A few
outer pieces cracked off
- Is there any soil washouts or ground depressions around the well? No
- What is the organic vapor reading on the well riser pipe? Ø
- Record depth to water. (southside) 4.43'
- Are there any immiscible layers? No
- Record depth to bottom of well. 13.35'
- Is the bottom hard or silted? soft, silted
- Compare field observations to well construction log if available. _____

- replaced lock

9/19/97
AW/SD

Dartron B-5
WELL INTEGRITY INFORMATION FORM

- Is the well locked? Yes? with bolts
- What is the condition of the protective casing? Metal covering is intact
- Does the well have an identification label on it? NO
- Does the well have any discharge or electrical conduits attached to it? No
- Is there any evidence of visual damage or tampering? No
- Are there any cracks or settlement in the casing seal? None that can be seen - well casing cap is flush with ground
- Are there any cracks or settlement in the concrete cap (if present)? none are apparent; looks intact
- Is there any soil washouts or ground depressions around the well? the ground around the well (~15' radius) is uneven but not washed out
- What is the organic vapor reading on the well riser pipe? 0.20
- Record depth to water. (south side) 4.95'
- Are there any immiscible layers? No
- Record depth to bottom of well. 15.13'
- Is the bottom hard or silted? hard bottom
- Compare field observations to well construction log if available. _____

* no rubber seal on well cap - doesn't shut tightly

* lots of tiny ants inside well ~~casing~~ cover

9/19/97
AW/JD

Dartron B-6

WELL INTEGRITY INFORMATION FORM

- Is the well locked? NO cover but cap is locked
- What is the condition of the protective casing? Metal neck is removable - not much protection
- Does the well have an identification label on it? NO
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO tampering but metal neck is removable
- Are there any cracks or settlement in the casing seal? ~~YES~~ NO; seal is intact; no cracks visible
- Are there any cracks or settlement in the concrete cap (if present)? yes; its all cracked apart
- Is there any soil washouts or ground depressions around the well? NO
- What is the organic vapor reading on the well riser pipe? ~~0~~
- Record depth to water. (southside) 4.13
- Are there any immiscible layers? NO
- Record depth to bottom of well. 14.80'
- Is the bottom hard or silted? soft
- Compare field observations to well construction log if available. _____

- replaced ~~cap~~ lock

9/19/97

Dartron 40

WELL INTEGRITY INFORMATION FORM

- Is the well locked? YES
- What is the condition of the protective casing? intact
- Does the well have an identification label on it? No
- Does the well have any discharge or electrical conduits attached to it? No
- Is there any evidence of visual damage or tampering? No
- Are there any cracks or settlement in the casing seal? No
- Are there any cracks or settlement in the concrete cap (if present)? No
- Is there any soil washouts or ground depressions around the well? No
- What is the organic vapor reading on the well riser pipe? 0
- Record depth to water. (southside) 5.11'
- Are there any immiscible layers? No
- Record depth to bottom of well. 12.95'
- Is the bottom hard or silted? hard
- Compare field observations to well construction log if available. _____

- replaced lock

Well casing stands up ~3' in the air
- all other wells at Dartron are flush with the ground.

- well in good condition

Dartron ~~826~~ 47

9/19/97
AW/J.D.

WELL INTEGRITY INFORMATION FORM

- Is the well locked? 4 allen wrench bolts / locked inside
- What is the condition of the protective casing? intact
- Does the well have an identification label on it? No
- Does the well have any discharge or electrical conduits attached to it? No
- Is there any evidence of visual damage or tampering? No
- Are there any cracks or settlement in the casing seal? No
- Are there any cracks or settlement in the concrete cap (if present)? Small ^{surface} cracks next to metal cap
- Is there any soil washouts or ground depressions around the well? No
- What is the organic vapor reading on the well riser pipe? 0
- Record depth to water. (south side) 5.47'
- Are there any immiscible layers? No
- Record depth to bottom of well. 9.97'
- Is the bottom hard or silted? hard
- Compare field observations to well construction log if available. _____

* replaced lock ; original one wouldnt unlock

9/19/97
AW/JD

Dartron 49

WELL INTEGRITY INFORMATION FORM

- Is the well locked? Allen wrench bolts / locked inside
- What is the condition of the protective casing? intact
- Does the well have an identification label on it? No
- Does the well have any discharge or electrical conduits attached to it? No
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? No
- Are there any cracks or settlement in the concrete cap (if present)? NO
- Is there any soil washouts or ground depressions around the well? soil is washed out around concrete caps
- What is the organic vapor reading on the well riser pipe? 40-100 (40 average spike 100)
- Record depth to water. (south side) 5.19'
- Are there any immiscible layers? No
- Record depth to bottom of well. 9.92
- Is the bottom hard or silted? hard (clay on bottom of probe)
- Compare field observations to well construction log if available. _____

x replaced lock

PID readings spiked at 100

Used Dräger tubes for Vinyl chloride & Benzene

- no indication of Vinyl chloride
- no benzene detected

STUDY AREA 2

SW2-1

WELL INTEGRITY INFORMATION FORM

SW2-1
10/21/97
10:35 TCS ~~mmmm~~

- Is the well locked? yes
- What is the condition of the protective casing? good
- Does the well have an identification label on it? yes
- Does the well have any discharge or electrical conduits attached to it? no
- Is there any evidence of visual damage or tampering? no
- Are there any cracks or settlement in the casing seal? no
- Are there any cracks or settlement in the concrete cap (if present)? no
- Is there any soil washouts or ground depressions around the well? no
- What is the organic vapor reading on the well riser pipe? 2.1 ppm (1.7 back-ground)
- Record depth to water. 19.86'
- Are there any immiscible layers? no nopol/dnapi
- Record depth to bottom of well. 44.54'
- Is the bottom hard or silted? hard
- Compare field observations to well construction log if available. _____

SW 2-2

WELL INTEGRITY INFORMATION FORM

SW2-2
10/21/97
RES mmm

- Is the well locked? yes
- What is the condition of the protective casing? Good
- Does the well have an identification label on it? yes
- Does the well have any discharge or electrical conduits attached to it? no
- Is there any evidence of visual damage or tampering? no
- Are there any cracks or settlement in the casing seal? no
- Are there any cracks or settlement in the concrete cap (if present)? no
- Is there any soil washouts or ground depressions around the well? no
- What is the organic vapor reading on the well riser pipe? 1.8 ppm
- Record depth to water. 12.82
- Are there any immiscible layers? no
- Record depth to bottom of well. 36.38
- Is the bottom hard or silted? hard
- Compare field observations to well construction log if available. _____

STUDY AREA 3

CL# 3-1

9/17/97
ms

WELL INTEGRITY INFORMATION FORM

- Is the well locked? YES
- What is the condition of the protective casing? GOOD - 10" DIA
- Does the well have an identification label on it? "MW-1"
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? NO
- Are there any cracks or settlement in the concrete cap (if present)? NO
- Is there any soil washouts or ground depressions around the well? NO
- What is the organic vapor reading on the well riser pipe? 0 w/ PID
- Record depth to water. 8.11'
- Are there any immiscible layers? No
- Record depth to bottom of well. 52.65
- Is the bottom hard or silted? HARD
- Compare field observations to well construction log if available. _____

CL# ~~3-2~~ 3-2

9/17/97

CW

WELL INTEGRITY INFORMATION FORM

- Is the well locked? YES
- What is the condition of the protective casing? GOOD - 10" DIA
- Does the well have an identification label on it? MW-2
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? NO
- Are there any cracks or settlement in the concrete cap (if present)? NA
- Is there any soil washouts or ground depressions around the well? NO
- What is the organic vapor reading on the well riser pipe? 0 w/ PID
- Record depth to water. 9.71'
- Are there any immiscible layers? NO
- Record depth to bottom of well. 45.82'
- Is the bottom hard or silted? HARD
- Compare field observations to well construction log if available. _____

CL# 3-3

9/17/97
CW

WELL INTEGRITY INFORMATION FORM

- Is the well locked? YES
- What is the condition of the protective casing? GOOD - 10" DIA
- Does the well have an identification label on it? MW-3
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? NO
- Are there any cracks or settlement in the concrete cap (if present)? NA
- Is there any soil washouts or ground depressions around the well? NO
- What is the organic vapor reading on the well riser pipe? Ø
- Record depth to water. 22.31
- Are there any immiscible layers? NO
- Record depth to bottom of well. 45.40
- Is the bottom hard or silted? HARD
- Compare field observations to well construction log if available. _____

CL# 3-4

9/17/97
CWS

WELL INTEGRITY INFORMATION FORM

- Is the well locked? YES
- What is the condition of the protective casing? GOOD - 10" DIA
- Does the well have an identification label on it? MW-4
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? NO
- Are there any cracks or settlement in the concrete cap (if present)? NA
- Is there any soil washouts or ground depressions around the well? NO
- What is the organic vapor reading on the well riser pipe? Ø
- Record depth to water. 17.87'
- Are there any immiscible layers? NO
- Record depth to bottom of well. 47.28'
- Is the bottom hard or silted? HARD
- Compare field observations to well construction log if available. _____

CL# 3-5

9/17/97
CW

WELL INTEGRITY INFORMATION FORM

- Is the well locked? YES
- What is the condition of the protective casing? GOOD - 10" DIA
- Does the well have an identification label on it? MW-5
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? NO
- Are there any cracks or settlement in the concrete cap (if present)? NA
- Is there any soil washouts or ground depressions around the well? NO
- What is the organic vapor reading on the well riser pipe? Ø
- Record depth to water. 18.43
- Are there any immiscible layers? NO
- Record depth to bottom of well. 47.23
- Is the bottom hard or silted? HARD
- Compare field observations to well construction log if available. _____

WELL ID: CL3-6

STUDY AREA

WELL INTEGRITY INFORMATION FORM

INSPECTOR
DATE
TIME

- Is the well locked? YES.
- What is the condition of the protective casing? GOOD - SOLID.
8" STEEL ROUND. 16" TALL.
- Does the well have an identification label on it? YES - MW6
- Does the well have any discharge or electrical conduits attached to it? NO.
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? NO
- Are there any cracks or settlement in the concrete cap (if present)? NO CONCRETE CAP
- Is there any soil washouts or ground depressions around the well? NO WASHOUTS
NO DEPRESSIONS BUT 1CM GAP BETWEEN SOIL & GROUT ON LAKE SIDE OF WELL
- What is the organic vapor reading on the well riser pipe? _____
- Record depth to water. _____
- Are there any immiscible layers? _____
- Record depth to bottom of well. _____
- Is the bottom hard or silted? _____
- Compare field observations to well construction log if available. _____

CL# 3-6

9/17/97
CW

WELL INTEGRITY INFORMATION FORM

- Is the well locked? YES
- What is the condition of the protective casing? GOOD - 10" DIA
- Does the well have an identification label on it? YES - "MW-6"
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? NO
- Are there any cracks or settlement in the concrete cap (if present)? NO
- Is there any soil washouts or ground depressions around the well? NO
- What is the organic vapor reading on the well riser pipe? 0.0 w/PID
- Record depth to water. 15.40
- Are there any immiscible layers? NO
- Record depth to bottom of well. 47.31
- Is the bottom hard or silted? HARD
- Compare field observations to well construction log if available. _____

STUDY AREA 4

WELL INTEGRITY INFORMATION FORM

SW4-1

10/22/92

TCS
MMM

- Is the well locked? yes
- What is the condition of the protective casing? Good
- Does the well have an identification label on it? yes
- Does the well have any discharge or electrical conduits attached to it? no
- Is there any evidence of visual damage or tampering? no
- Are there any cracks or settlement in the casing seal? no
- Are there any cracks or settlement in the concrete cap (if present)? no
- Is there any soil washouts or ground depressions around the well? no
- What is the organic vapor reading on the well riser pipe? 0-0 ppm
- Record depth to water. 27.71
- Are there any immiscible layers? NO LNAPL/DNAPL
- Record depth to bottom of well. 38.92
- Is the bottom hard or silted? hard, silted
- Compare field observations to well construction log if available. _____

WELL INTEGRITY INFORMATION FORM

SW4-4
10/22/97
JCS/mm

- Is the well locked? yes
- What is the condition of the protective casing? good
- Does the well have an identification label on it? yes
- Does the well have any discharge or electrical conduits attached to it? no
- Is there any evidence of visual damage or tampering? no
- Are there any cracks or settlement in the casing seal? no
- Are there any cracks or settlement in the concrete cap (if present)? no
- Is there any soil washouts or ground depressions around the well? no
- What is the organic vapor reading on the well riser pipe? 0.0 ppm
- Record depth to water. 14.21
- Are there any immiscible layers? no LNAPL/DNAPL
- Record depth to bottom of well. 25.84
- Is the bottom hard or silted? Silted, hard
- Compare field observations to well construction log if available. _____

STUDY AREA 5

WELL ID: GL5-1
STUDY AREA: 5

WELL INTEGRITY INFORMATION FORM

INSPECTOR: SRZ
DATE: 8-27-97
TIME: 10:00

- Is the well locked? YES
- What is the condition of the protective casing? 4 INCH ROUND METAL
THREADS ON TOP PAINTED YELLOW.
- Does the well have an identification label on it? YES - 5 (PAINTED ON)
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? SOME RUST NO DAMAGE
NO TAMPERING
- Are there any cracks or settlement in the casing seal? NO - MOSTLY COVER
GROWN WITH GRASSES
- Are there any cracks or settlement in the concrete cap (if present)? NO CONCRETE POD.
- Is there any soil washouts or ground depressions around the well? NO.
- What is the organic vapor reading on the well riser pipe? >3K ^{BREATHING ZONE}
BACKGROUND = 180
- Record depth to water. 31.43 FROM STEEL PROTECTIVE CASING ←
- Are there any immiscible layers? NO
- Record depth to bottom of well. 41.03 FROM STEEL PROTECTIVE CASING ←
- Is the bottom hard or silted? HARDISH
- Compare field observations to well construction log if available. PVC IS APPROX 1 FT BELOW TOP OF STEEL PROTECTIVE OUTER
CASING - CANNOT PUT HAND INSIDE TO TOUCH PVC. OR MEASURE

PHOTO 2/12 KODAK ROLL

RECOMMENDATIONS: REMOVE RUST FROM THREADS
WITH WIRE BRUSH.
UPDATE LABEL

WELL ID: CLS-2

STUDY AREA 5

WELL INTEGRITY INFORMATION FORM

INSPECTOR: SDR
DATE 8-29-97
TIME:

- Is the well locked? YES
- What is the condition of the protective casing? RUSTED / SOLID 4 INCH STEEL
TREADED (ROUND) 4 INCH STICKUP
- Does the well have an identification label on it? NO
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? CANNOT SEE STEEL
- Are there any cracks or settlement in the concrete cap (if present)? NO CONCRETE CAP
- Is there any soil washouts or ground depressions around the well? NO WASHOUT OR DEPRESSION
- What is the organic vapor reading on the well riser pipe? 600
- Record depth to water. 445
- Are there any immiscible layers? YES
(* No layers were observed on 10/1/97 During Sampling)
- Record depth to bottom of well. 80.5
- Is the bottom hard or silted? SILT
- Compare field observations to well construction log if available. _____

STUDY AREA 6

WELL ID: CL6-1
STUDY AREA: 6

WELL INTEGRITY INFORMATION FORM

INSPECTOR: SRZ
DATE: 8-27-97
TIME: 12:25

- Is the well locked? YES
- What is the condition of the protective casing? GOOD
- Does the well have an identification label on it? YES - 1 (PAINTED ON)
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? NO
- Are there any cracks or settlement in the concrete cap (if present)? NO CRACK
NO CAP PRESENT.
- Is there any soil washouts or ground depressions around the well? NO WASHOUTS
BUT OBVIOUS SEPERATION BETWEEN GROUT + SOIL - SINGLE LCM.
- What is the organic vapor reading on the well riser pipe? 9ppm BACKGROUND ~ 2
- Record depth to water. 13.02 Ft TOP OF PVC
- Are there any immiscible layers? NO
- Record depth to bottom of well. 25.88
- Is the bottom hard or silted? HARD.
- Compare field observations to well construction log if available. _____

8-28-97
15:45

PICTURES: 5/12 ; 6/12 ; 7/12

WELLID: CL 6-1A

STUDY AREA: G

WELL INTEGRITY INFORMATION FORM

INSPECTOR: STZ

DATE 8-27-97

TIME 6:12:30

- Is the well locked? YES.
- What is the condition of the protective casing? GOOD - SOLID.
- Does the well have an identification label on it? YES - 1A (PAINTED ON)
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
~ 5CM SETTLEMENT FILLED WITH TOPSOIL
- Are there any cracks or settlement in the casing seal? CANNOT SEE SEAL
~ 5CM SETTLEMENT FILLED WITH TOPSOIL & OVER GROWN W/ GRASS
- Are there any cracks or settlement in the concrete cap (if present)? NO CAP.
- Is there any soil washouts or ground depressions around the well? YES
APPROX ^{5CM} 5CM DEPRESSION, NO WASHOUT
- What is the organic vapor reading on the well riser pipe? 50 ppm BACKGROUND ~ 2.
- Record depth to water. 13.10 Ft (TOP OF PVC) 16:05 - 8/28/97
- Are there any immiscible layers? NO.
- Record depth to bottom of well. 18.93 TOP OF PVC
- Is the bottom hard or silted? HARD
- Compare field observations to well construction log if available. _____

PICTURES: 5/12; 6/12; 7/12

WELL ID CL62
AREA 6

WELL INTEGRITY INFORMATION FORM

INSPECTOR STUB

DATE 9-2-97

TIME 16:45

- Is the well locked? YES.
- What is the condition of the protective casing? PAINTED YELLOW WITH RUST.
- Does the well have an identification label on it? YES 2A
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? CANNOT SEE SEAL
- Are there any cracks or settlement in the concrete cap (if present)? NO CON. CAP
- Is there any soil washouts or ground depressions around the well? YES
NEAREST 4-6 CM TO WELL DOWN 10-20 CM WITH CRACKS EXTENDING DEEPER
- What is the organic vapor reading on the well riser pipe? 0.00 PM WELL 0.00 PM B.G.
- Record depth to water. 38.14
- Are there any immiscible layers? NO
- Record depth to bottom of well. 39.07
- Is the bottom hard or silted? _____
- Compare field observations to well construction log if available. _____

16:00
9-2-97
BY
R.S.A.

WELL ID: CLG-3

STUDY AREA: G

WELL INTEGRITY INFORMATION FORM

INSPECTOR: STE
DATE: 8-27-97
TIME: 12:00

- Is the well locked? YES
- What is the condition of the protective casing? SOLID - 4 INCH ROUND STEEL WITH THREADED CAP.
- Does the well have an identification label on it? YES - 3 (PAINTED ON & FADING OFF)
- Does the well have any discharge or electrical conduits attached to it? NO.
- Is there any evidence of visual damage or tampering? NO
THREADED CAP LOOKS NEW.
- Are there any cracks or settlement in the casing seal? CANNOT SEE SEAL
- Are there any cracks or settlement in the concrete cap (if present)? NO CAP.
- Is there any soil washouts or ground depressions around the well? YES
LARGE GRAVEL USED TO FILL WASHOUT TO 1 FEET DEEP
- What is the organic vapor reading on the well riser pipe? 35 PPM BACKGROUND 22.0
- Record depth to water. 17.87
- Are there any immiscible layers? NO
- Record depth to bottom of well. 18.82
- Is the bottom hard or silted? _____
- Compare field observations to well construction log if available. _____

PICTURE: 3/12 KODAK 1200

RECOMMENDATIONS: DIG OUT GRAVEL
REDO SEAL
ADD 2X2 CAP.

WELL ID: CL6-4

STUDY AREA 6

WELL INTEGRITY INFORMATION FORM

INSPECTOR: SRZ
DATE: 8-27-77
TIME: 11:45

- Is the well locked? YES
- What is the condition of the protective casing? LOOSE PARTIALLY RUSTED
CAP = TREADED NOT TIGHT.
- Does the well have an identification label on it? YES - 4 (PAINTED ON)
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? NO
- Are there any cracks or settlement in the concrete cap (if present)? NO CAP PRESENT.
- Is there any soil washouts or ground depressions around the well? YES.
WHOLE STEEL CAP MOVE ~ 1-2 CM
- What is the organic vapor reading on the well riser pipe? 100 BACKGROUND / > 3K @ WELL HEAD
- Record depth to water. 4.22
- Are there any immiscible layers? _____
- Record depth to bottom of well. 19.25
- Is the bottom hard or silted? SOFT.
- Compare field observations to well construction log if available. _____

PICTURE 4/12

WELL ID. : CLG-5

STUDY AREA : 6

WELL INTEGRITY INFORMATION FORM

- Is the well locked? YES
- What is the condition of the protective casing? GOOD
- Does the well have an identification label on it? YES G-B
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? YES SMALL SEPARATION BETWEEN GROUT AND STEEL CASING
- Are there any cracks or settlement in the concrete cap (if present)? NO CAP
- Is there any soil washouts or ground depressions around the well? NO WASHOUTS 6 CM DEPRESSION FOR 10 CM DIAMETER AROUND CASING
- What is the organic vapor reading on the well riser pipe? 4 ppm NOTE: SET PID ON GROUND BY WELL READING = 150 ppm BACKGROUND = 1.5
- Record depth to water. 17.34 FROM TOP OF PVC
- Are there any immiscible layers? NO
- Record depth to bottom of well. 62.75
- Is the bottom hard or silted? NOT HARD POSSIBLE SILT
- Compare field observations to well construction log if available.

8-23-97

15:15

PICTURE 9/12 KODAK ROLL

WELL ID: CLG-6

AREA: 6

WELL INTEGRITY INFORMATION FORM

INSPECTOR: SRZ & PSA

DATE 9/2/97

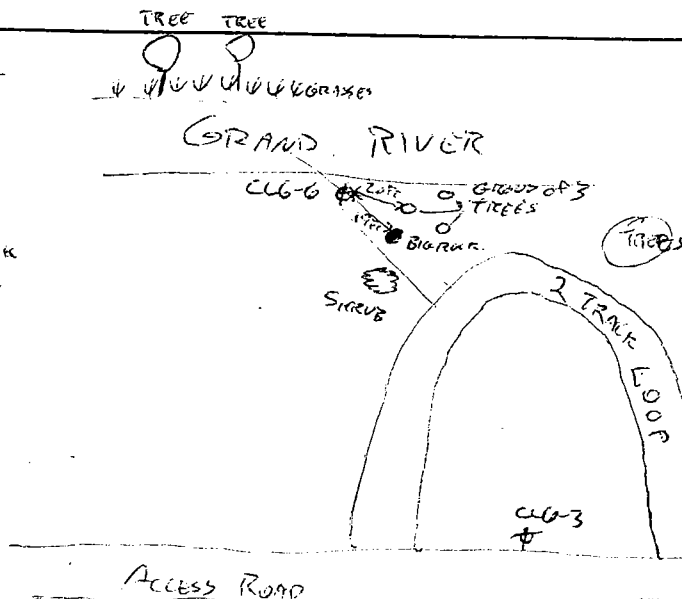
TIME: 15:00

- Is the well locked? YES
- What is the condition of the protective casing? BURIED / RUSTED
TOP IS BELOW ^{SURROUNDING} GROUND SURFACE
- Does the well have an identification label on it? NO
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? CASING SEAL NOT VISIBLE
- Are there any cracks or settlement in the concrete cap (if present)? NO CAP
- Is there any soil washouts or ground depressions around the well? YES
30 CM WIDE DEPRESSION AROUND WELL 10-20 CM DEEP SILTED IN & COVER GROWN WITH TALL GRASSES
- What is the organic vapor reading on the well riser pipe? 30 ppm / 0 ppm - Bn & Granite
- Record depth to water. 3.26 Ft (PVC)
- Are there any immiscible layers? POSSIBLE 3.25 Ft (PVC)
- Record depth to bottom of well. 7.9 Ft (PVC)
- Is the bottom hard or sifted? SILTED
- Compare field observations to well construction log if available. _____

15:50

PICTURE 6/24 FUJIL
7/24 FUJIL

WELL IS 19 FT FROM TOP OF BIG ROCK
IN DIRECTION TOWARDS 2ND OF 2 TREES ON
OPPOSITE SIDE OF RIVER
AND 20 FT FROM NEAREST OF GROUP
OF 3 TREES



N 41° 45.169
R: REPORT 514493003.FRM
W 81° 14.854

WELL ID CLG-7
AREA 6

WELL INTEGRITY INFORMATION FORM

Inspection - SRZ
DATE 9-2-97
TIME 14:15

- Is the well locked? YES Silted stuck.
- What is the condition of the protective casing? SHORT RUBBED SOLID.
6 CM STICKUP
- Does the well have an identification label on it? NO BUT SIGN NEXT TO IT [2]
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
SILTED AROUND WELL
- Are there any cracks or settlement in the casing seal? CANNOT SEE SEAL
SILTED AROUND WELL
- Are there any cracks or settlement in the concrete cap (if present)? NO CON. CAP.
- Is there any soil washouts or ground depressions around the well? NO.
- What is the organic vapor reading on the well riser pipe? 81 ppm @ WELL / 0 ppm BG.
- Record depth to water. 4.75 ft
- Are there any immiscible layers? 4.745 ft VERY SLIGHT IF PRESENT.
- Record depth to bottom of well. 10.75
- Is the bottom hard or silted? SILTED - VERY SOFT.
- Compare field observations to well construction log if available. NA

15:40

PICTURED (8-12)/24 FUSI 1

WELL ID: CLG-8

AREA: 6

WELL INTEGRITY INFORMATION FORM

INSPECTOR: SRZ
DATE: 8-28-97
TIME: 18:15

- Is the well locked? LOCKED
- What is the condition of the protective casing? GOOD SOLID. = OUTER 34"
- Does the well have an identification label on it? NO
- Does the well have any discharge or electrical conduits attached to it? NO
- Is there any evidence of visual damage or tampering? NO
- Are there any cracks or settlement in the casing seal? SILTED AROUND
CAN NOT SEE SEAL, PVC LOOSE INSIDE 4" STEEL CASING
- Are there any cracks or settlement in the concrete cap (if present)? NO CAP
- Is there any soil washouts or ground depressions around the well? NO
- What is the organic vapor reading on the well riser pipe? 2030 ppm / 5 ppm INSIDE 24"
- Record depth to water. 6.67
- Are there any immiscible layers? NO
WATER YELLOW LIKE LEMONADE.
- Record depth to bottom of well. 163
- Is the bottom hard or silted? YES
- Compare field observations to well construction log if available. _____

SMALL BLACK SNAKE IN WELL - AGGRESSIVE.
PICTURE 10/12 11/12

WELL ID: GL6-9

AREA: G-

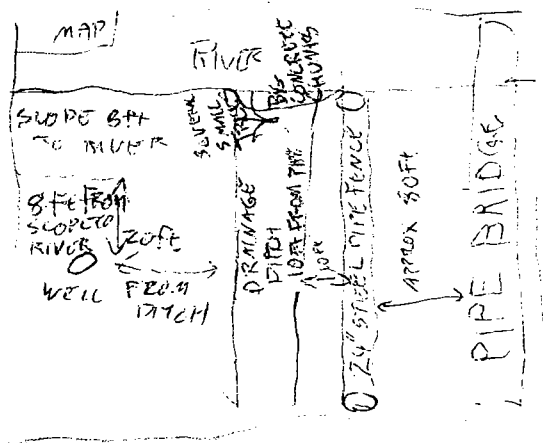
WELL INTEGRITY INFORMATION FORM

INSPECTOR: SRZ
DATE: 8-29-97
TIME: 9:15

- MASTERLOCK KEYS FIT
- Is the well locked? YES - NO KEYS WORK / SERIES 20 AMERICAN LOCK U.S.A. S.F.M.
 - What is the condition of the protective casing? SHORT & RUSTED
THREADED COVER/CAP. 6 INCHES STICK UP
 - Does the well have an identification label on it? NO
 - Does the well have any discharge or electrical conduits attached to it? NO
 - Is there any evidence of visual damage or tampering? NO
LOCK FLAP BENT - POSSIBLY FROM ICE
 - Are there any cracks or settlement in the casing seal? CANNOT SEE SEAL.
SLIGHT DEPRESSION IS FILLED WITH SILT.
 - Are there any cracks or settlement in the concrete cap (if present)? NO CAP
GRASSES GROWN UP TO PROTECTIVE STEEL CASING.
 - Is there any soil washouts or ground depressions around the well? NO SLIGHT DEPRESSION 2-3 CM.
 - What is the organic vapor reading on the well riser pipe? 90 ppm
 - Record depth to water. 6.81
 - Are there any immiscible layers? NO
 - Record depth to bottom of well. 12.76
 - Is the bottom hard or silted? SILTED, SOFT
 - Compare field observations to well construction log if available. NA

WELL
LOCKED
NO ENTRY
8-29-97
RECORDED
10/2/97
@ TIME
of SUNDAY

R:\REPORTS\4493003.FRM



STUDY AREA 7

WELL INTEGRITY INFORMATION FORM

SW7-2

TR5
mmmm

10/22/97

- Is the well locked? yes
- What is the condition of the protective casing? good
- Does the well have an identification label on it? yes
- Does the well have any discharge or electrical conduits attached to it? no
- Is there any evidence of visual damage or tampering? no
- Are there any cracks or settlement in the casing seal? no
- Are there any cracks or settlement in the concrete cap (if present)? no
- Is there any soil washouts or ground depressions around the well? no
- What is the organic vapor reading on the well riser pipe? 17.3 ppm (7.8 back ground)
- Record depth to water. 8'
- Are there any immiscible layers? NO LNAPL/DNAPL
- Record depth to bottom of well. 11.75'
- Is the bottom hard or silted? hard
- Compare field observations to well construction log if available. _____

WELL INTEGRITY INFORMATION FORM

SW7-3
10/22/97
TJS MMM

- Is the well locked? yes
- What is the condition of the protective casing? good
- Does the well have an identification label on it? yes
- Does the well have any discharge or electrical conduits attached to it? no
- Is there any evidence of visual damage or tampering? no
- Are there any cracks or settlement in the casing seal? no
- Are there any cracks or settlement in the concrete cap (if present)? no
- Is there any soil washouts or ground depressions around the well? no
- What is the organic vapor reading on the well riser pipe? 0.0 ppm
- Record depth to water. 9.6
- Are there any immiscible layers? NO LNAPL/DNAPL
- Record depth to bottom of well. 18.6
- Is the bottom hard or silted? hard
- Compare field observations to well construction log if available. _____

WELL INTEGRITY INFORMATION FORM

SW7-4
TCS/MMM
10/23/97

- Is the well locked? yes
- What is the condition of the protective casing? good
- Does the well have an identification label on it? yes
- Does the well have any discharge or electrical conduits attached to it? no
- Is there any evidence of visual damage or tampering? no
- Are there any cracks or settlement in the casing seal? no
- Are there any cracks or settlement in the concrete cap (if present)? no
- Is there any soil washouts or ground depressions around the well? no
- What is the organic vapor reading on the well riser pipe? 20.7 ppm
- Record depth to water. 7.50
- Are there any immiscible layers? no LNAPL/DNAPL
- Record depth to bottom of well. 18.72
- Is the bottom hard or silted? hard, some silt
- Compare field observations to well construction log if available. _____

APPENDIX D

MONITORING WELL DEVELOPMENT RECORDS

STUDY AREA 1

MONITORING WELL DEVELOPMENT RECORD

Painesville Works Site

Painesville, Ohio

Project No. W0021-001-20 Project Location S.A.1-NWRR
Well I.D. SW1-1 Date 10-9-97

WELL DATA	
Well Diameter (in.)	2" PVC
Total Well Depth (ft)	40.3
Depth to Top of Screen (ft)	28.1'
Screen Length (ft)	10'
Depth to Static Water Level (ft)	8.95

Equipment Used SUBMERSIBLE Pump

Development Method Used Pumped

Volume (gallons)	pH (S.U.)	Eh (mV) Color	Specific Conductance (m-ohms)	Temperature (C)	Other (specify) Turbidity
START	10.01	cloudy	1.42	16.7	TURBID
6.6 gal	9.04	cloudy	.82	16.6	"'
12.5	7.64	"	1.11	15.8	"

9:40
Comments DRY @ 12.5 gal

Development Personnel Bowser Moore 4027 BLC

MONITORING WELL DEVELOPMENT RECORD

Painesville Works Site

Painesville, Ohio

Project No. W0021-001-20 Project Location S.A.1-NWRR

Well I.D. SW1-2 Date 10-9-97

WELL DATA	
Well Diameter (in.)	2" PVC
Total Well Depth (ft)	32.25
Depth to Top of Screen (ft)	19.5'
Screen Length (ft)	10'
Depth to Static Water Level (ft)	9.78

Equipment Used ~~Submersible~~ Submersible Pump

Development Method Used Pumped

Volume (gallons)	pH (S.U.)	Eh (mv) Color	Specific Conductance (m-ohms)	Temperature (C)	Other (specify) Turbidity
START	6.78	Cloudy	1.39	20.4	none
5 GAL	7.04	Grey	1.70	15.7	TURBID
10 GAL	7.14	grey	1.84	15.5	"

Comments DRY @ 10 GAL 9:00

Development Personnel Bowser-Moore & Son BC

Painesville, Ohio

Date 10-9-97

Well Diameter (in.)	2" PVC
Total Well Depth (ft)	36.64
Depth to Top of Screen (ft)	24'
Screen Length (ft)	10'
Depth to Static Water Level (ft)	14.05

Equipment Used Submersible Pump

Development Method Used Pumped[illegible]

Comments DRY @ 11.0 GAL 10:25

Development Personnel *Business - Manager 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839*

MONITORING WELL DEVELOPMENT RECORD

Painesville Works Site

Painesville, Ohio

Project No. W0021-001-22 Project Location S.A.I-PVS
Well I.D. SW1-4 Date 10-9-97

WELL DATA	
Well Diameter (in.)	2" PVC
Total Well Depth (ft)	44.66
Depth to Top of Screen (ft)	31'
Screen Length (ft)	10'
Depth to Static Water Level (ft)	10.69

Equipment Used SUBmersible pump

Development Method Used Pumped

Volume (gallons)	pH (S.U.)	Eh (mV) COLOR	Specific Conductance (m ohms)	Temperature (C)	Other (specify) Turbidity
START	7.72	grey	2.3	17.0	TURBID
5.5	10.86	cloudy	2.0	15.9	TURBID TURBID
11.0	7.91	cloudy	2.4	15.9	TURBID
16.5	7.46	grey	2.3	15.5	TURBID

Comments DRY @ 11.5 GAL. Recharged AFTER 1.25 hrs
19:15

Development Personnel Bawser Morner WSDY BC

MONITORING WELL DEVELOPMENT RECORD

Painesville Works Site

Painesville, Ohio

Project No. W0021-001-23

Project Location ASR

Well I.D. SW1-5

Date 9/19/97 - 11:35 am

WELL DATA	
Well Diameter (in.)	2" PVC
Total Well Depth (ft)	41.6
Depth to Top of Screen (ft)	30'
Screen Length (ft)	10'
Depth to Static Water Level (ft)	10.55

Equipment Used DISPOSABLE BAILER

Development Method Used BAILED

Volume (gallons)	pH (S.U.)	Eh- (mV) COLOR	Specific Conductance (m-ohms) mS/cm	Temperature (C)	Other (specify) TURBIDITY
START	11.9	NONP	1.35	20°	NONP
5 gal	12.1	GREY	1.55	20	TURBID
10 gal	9.9	"	0.86	15°	"
12 gal	12.2	"	1.49	15°	"
(9/23) start	8.8	grey	1.09	14°	turbid
5 gal	9.1	cloudy	1.18	14°	turbid
10 gal	9.4	grey	1.13	14°	Turbid
12	9.0	grey	1.08	14°	turbid

Comments 9-19-97 DRY @ 12 gal @ 11:55 | 9-23-97 purged dry @ 12 gallons

Development Personnel C. SKIERA

MONITORING WELL DEVELOPMENT RECORD

Painesville Works Site

Painesville, Ohio

Project No. W0021-001-24 Project Location S.A.1- DARTON
Well I.D. SW1-6 Date 10-9-97

WELL DATA	
Well Diameter (in.)	2" PVC
Total Well Depth (ft)	19.05
Depth to Top of Screen (ft)	9.65'
Screen Length (ft)	10'
Depth to Static Water Level (ft)	9.95'

Equipment Used _____

Development Method Used _____

Volume (gallons)	pH (S.U.)	Eh (mV) COLOR	Specific Conductance (m-ohms) mS/cm	Temperature (C)	Other (specify) Turbidity
START	7.14	9.29	.89	19.5	Turbid
2.0	6.89	Cloudy	.79	17.6	"
4.0	7.34	"	.78	16.4	"
6.0	7.59	"	.99	16.4	"
8.0	7.74	9.28		16.0	"

Comments 10:55
dry @ 8.6

Development Personnel Ernst-Moore way BC

MONITORING WELL DEVELOPMENT RECORD

Painesville Works Site

Painesville, Ohio

Project No. W0021-001-34 Project Location S.A.1 - CHELMSFORD

Well I.D. SW1-7 Date 10-9-97

WELL DATA	
Well Diameter (in.)	2" PVC
Total Well Depth (ft)	36.5'
Depth to Top of Screen (ft)	25.8'
Screen Length (ft)	10'
Depth to Static Water Level (ft)	12.15

Equipment Used Submersible Pump

Development Method Used Submersible Pump

Volume (gallons)	pH (S.U.)	Eh (mV) COLOR	Specific Conductance (mohms) ⁻²	Temperature (C)	Other (specify) Turbidity
START	8.93	cloudy	1.98	18.4	TURBID
4.0	10.4	CLEAR	1.22	15.9	none
8.0	8.51	CLEAR	2.1	14.7	none
12.0	8.30	CLEAR	2.2	14.7	none

Comments DRY AT 12 gac 15:15

Development Personnel Douglas-Morris wsgy BC

STUDY AREA 2

MONITORING WELL DEVELOPMENT RECORD

Painesville Works Site

Painesville, Ohio

Project No. W0021-001-26 Project Location S.A. 2-Scepter
Well I.D. SW2-1 Date 10-9-97

WELL DATA	
Well Diameter (in.)	2" PVC
Total Well Depth (ft)	44.54
Depth to Top of Screen (ft)	32'
Screen Length (ft)	10'
Depth to Static Water Level (ft)	19.78

Equipment Used Submersible pump

Development Method Used Pump

Volume (gallons)	pH (S.U.)	Eh (mV) COLOR	Specific Conductance (m-ohms)	Temperature (C)	Other (specify) Turbidity
START	9.06	Smoky	.49	23.5	TURBID
4 gal	9.44	CLEAR	2.3	16.0	none
8 gal	8.40	CLEAR	3.4	15.1	none
12 gal	8.82	smoky	3.4	16.2	TURBID

Comments 17:30

Development Personnel Bowser Morris 207 BC

MONITORING WELL DEVELOPMENT RECORD

Painesville Works Site

Painesville, Ohio

Project No. W0021-001-26 Project Location S.A.2 - Scepter
Well I.D. SW2-2 Date 10-9-97

WELL DATA	
Well Diameter (in.)	2" PVC
Total Well Depth (ft)	36.38
Depth to Top of Screen (ft)	24'
Screen Length (ft)	10'
Depth to Static Water Level (ft)	12.75

Equipment Used Submersible Pump

Development Method Used Pumpout

Volume (gallons)	pH (S.U.)	Eh (mV) Color	Specific Conductance (mohms) ms/cm	Temperature (C)	Other (specify) Turbidity
START	8.79	Clear	1.38	24	none
4.0	9.45	cloudy	.68	16.6	TURBID
8.0	9.13	cloudy	1.0	14.9	"
12	9.33	cloudy	1.28	15.9	"

Comments 16:45

Development Personnel Bowser Merner BC

STUDY AREA 4

MONITORING WELL DEVELOPMENT RECORD

Painesville Works Site

Painesville, Ohio

Project No. W0021-001-19

Project Location S.A. 4-CLH

Well I.D. SW4-1

Date 10-9-97

WELL DATA	
Well Diameter (in.)	2" PVC
Total Well Depth (ft)	38.91
Depth to Top of Screen (ft)	26'
Screen Length (ft)	10'
Depth to Static Water Level (ft)	27.4

Equipment Used Submersible Pump

Development Method Used Pumped

Volume (gallons)	pH (S.U.)	Eh (mV) <u>COLOR</u>	Specific Conductance (m-ohms) ^{ms/cm}	Temperature (C)	Other (specify) <u>Turbidity</u>
START	10.75	CHARCOAL	3.2	23.9	TURBID
2.0 gAL	10.81	grey	3.4	18.5	"
4.0 gAL	11.27	grey	4.0	18.5	"
6.0 gAL	11.35	grey	4.2	14.1	"

Comments DRY AT 2.0 gAL AFTER ^{EVERY} 30 mins. made 1 well volume
1.3/3.0

Development Personnel Bowser-Morris 2/29/97 BC

MONITORING WELL DEVELOPMENT RECORD

Painesville Works Site

Painesville, Ohio

Project No. W0021-001-31 Project Location S.A.4-GRANTHAM
Well I.D. SW4-4 Date 10-9-97

WELL DATA	
Well Diameter (in.)	2" PVC
Total Well Depth (ft)	25.83
Depth to Top of Screen (ft)	9.5'
Screen Length (ft)	12.9
Depth to Static Water Level (ft)	16.84

Equipment Used Submersible Pump

Development Method Used Pumped

Volume (gallons)	pH (S.U.)	Eh (mV) COLOR	Specific Conductance (microhms)	Temperature (C)	Other (specify) Turbidity
START	8.62	DARK GRAY	3.6	21.4	TURBID
1.5	8.97	GRAY	3.5	15.8	TURBID
3.0	8.78	GRAY	3.2	17.6	TURBID
4.5	8.53	GRAY	3.5	16.8	TURBID

Comments DRY AT 4.5 GALS. 13:45

Development Personnel Bowser-Morner WJZ BC

STUDY AREA 7

MONITORING WELL DEVELOPMENT RECORD

Painesville Works Site

Painesville, Ohio

Project No. W0021-001-33 Project Location S.A.7-NACELLE

Well I.D. SW7-3 Date 10-9-97

WELL DATA	
Well Diameter (in.)	2" PVC
Total Well Depth (ft)	18.6
Depth to Top of Screen (ft)	6.2'
Screen Length (ft)	10'
Depth to Static Water Level (ft)	6.56

Equipment Used Submersible Pump

Development Method Used Pumped

Volume (gallons)	pH (S.U.)	Eh (mV) COLOR	Specific Conductance (mohms)	Temperature (C)	Other (specify) Turbidity
START	6.72	green Brown	1.83	21.3	TURBID
2 GAL	6.47	" "	1.55	17.2	"
4 GAL	6.48	" "	1.52	16.7	"
6 GAL	6.5	" "	1.41	16.6	"
8 GAL	6.48	Light blue DRAP	1.42	17.1	"
10 GAL	6.51	Cloudy	1.46	16.1	"
15	6.52	"	1.47	16.5	"
20	6.52	"	1.47	17.5	"
25	6.50	CLEAR	1.48	17.9	none
30	6.55	CLEAR	1.49	16.6	none

Comments 11:45

Development Personnel Bowser Morner using BC

MONITORING WELL DEVELOPMENT RECORD

Painesville Works Site

Painesville, Ohio

Project No. W0021-001-33

Project Location S.A. 7 - NACELLE

Well I.D. SW7-4

Date 10-9-97

WELL DATA	
Well Diameter (in.)	2" PVC
Total Well Depth (ft)	18.22
Depth to Top of Screen (ft)	8'
Screen Length (ft)	10'
Depth to Static Water Level (ft)	7.28

Equipment Used _____

Development Method Used _____

Volume (gallons)	pH (S.U.)	Eh (mV) color	Specific Conductance (m ohms) ^{ms/cm}	Temperature (C)	Other (specify) Turbidity
START	6.83	9.0	6.1	23.3	Turbid
2.0	6.8	cloudy	3.8	19.0	TURBID
4.0	6.78	cloudy	8.8	17.9	NONE
6.0	7.13	cloudy	8.5	16.8	TURBID
8.0	7.18	9.0	8.1	16.9	"

Comments

DRY @ 8.0 12:15

Development Personnel

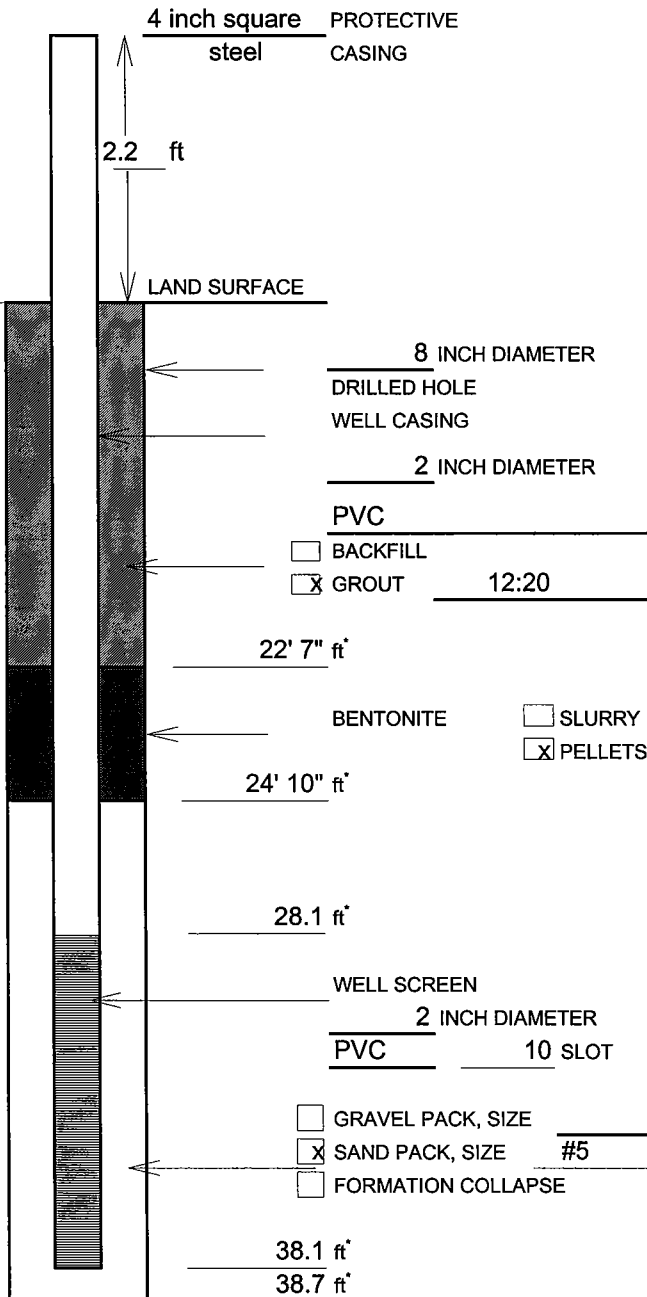
Bowen Mores usg BC

APPENDIX C

MONITORING WELL CONSTRUCTION LOGS

SECOR

WELL CONSTRUCTION LOG



* DEPTH BELOW LAND SURFACE

MEASURING POINT IS TOP OF WELL CASING
UNLESS NOTED OTHERWISE

PROJECT	Chemical Land Holdings
PROJECT #	W0021-001-20
WELL	SW1-1
TOWN/CITY & STATE	Painsville, OH

LAND SURFACE ELEVATION AND DATUM 616.49'
☒ SURVEYED ☐ ESTIMATED

INSTALLATION DATE(S):
START DATE & TIME 9/26/97 / 10:05
COMPLETION DATE & TIME 9/26/97

DRILLING METHOD 4 1/4" Hollow Stem Auger
 DRILLING CONTRACTOR Bowser Morner
 DRILLING FLUID None

DEVELOPMENT TECHNIQUE(S) AND DATE(S)

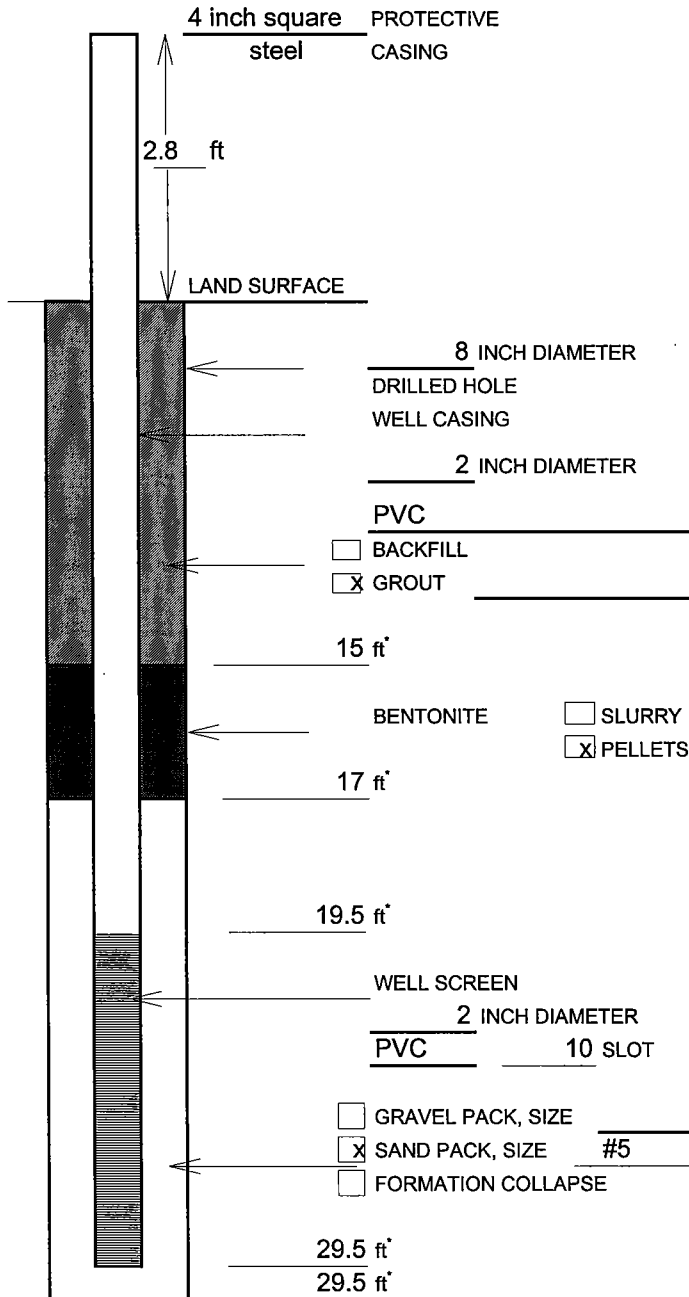
WATER REMOVED DURING DEVELOPMENT		
STATIC DEPTH TO WATER	see develop. log	
GROUT	8% BENTONITE VOLUME	50 gal

METHOD OF PLACEMENT _____
GRAVEL/SAND VOLUME 400 POUNDS
METHOD OF PLACEMENT Gravity

PREPARED BY: Stephen Zayko

SECOR

WELL CONSTRUCTION LOG



* DEPTH BELOW LAND SURFACE

MEASURING POINT IS TOP OF WELL CASING
UNLESS NOTED OTHERWISE

PROJECT Chemical Land Holdings
PROJECT # W0021-001-20
WELL SW1-2
TOWN/CITY & STATE Painsville, OH

LAND SURFACE ELEVATION AND DATUM 617.67'
☒ SURVEYED ☐ ESTIMATED

INSTALLATION DATE(S):
START DATE & TIME 9/25/97 / 16:05
COMPLETION DATE & TIME 9/25/97 / 19:00

DRILLING METHOD 4 1/4" Hollow Stem Auger
DRILLING CONTRACTOR Bowser Morner
DRILLING FLUID None

DEVELOPMENT TECHNIQUE(S) AND DATE(S)

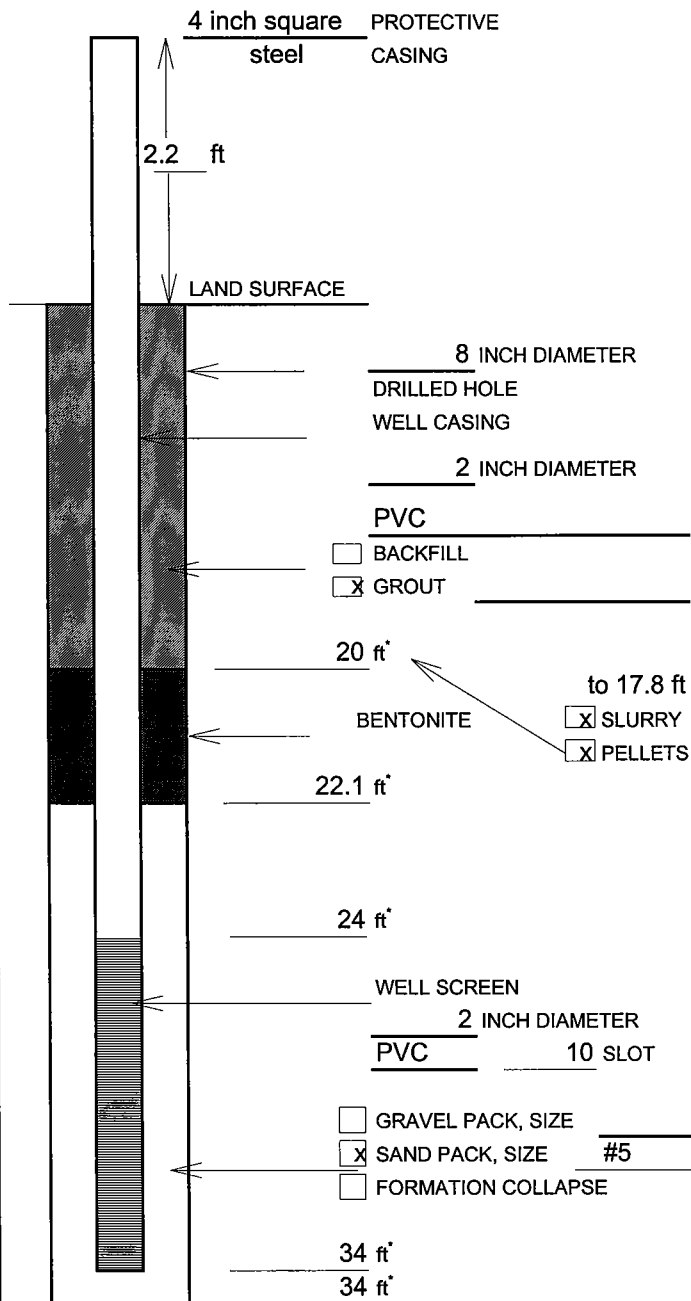
WATER REMOVED DURING DEVELOPMENT
STATIC DEPTH TO WATER see develop. log
GROUT 10% BENTONITE VOLUME 40 gal

METHOD OF PLACEMENT _____
GRAVEL/SAND VOLUME 350 POUNDS
METHOD OF PLACEMENT Gravity

PREPARED BY: Stephen Zayko

SECOR

WELL CONSTRUCTION LOG



* DEPTH BELOW LAND SURFACE

MEASURING POINT IS TOP OF WELL CASING
UNLESS NOTED OTHERWISE

PROJECT Chemical Land Holdings
PROJECT # W0021-001-21
WELL SW1-3
TOWN/CITY & STATE Painsville, OH

LAND SURFACE ELEVATION AND DATUM 618.27'
☒ SURVEYED ☐ ESTIMATED

INSTALLATION DATE(S):
START DATE & TIME 9/24/97 / 16:20
COMPLETION DATE & TIME 9/25/97 / 11:30

DRILLING METHOD 4 1/4" Hollow Stem Auger
DRILLING CONTRACTOR Bowser Morner
DRILLING FLUID None

DEVELOPMENT TECHNIQUE(S) AND DATE(S)

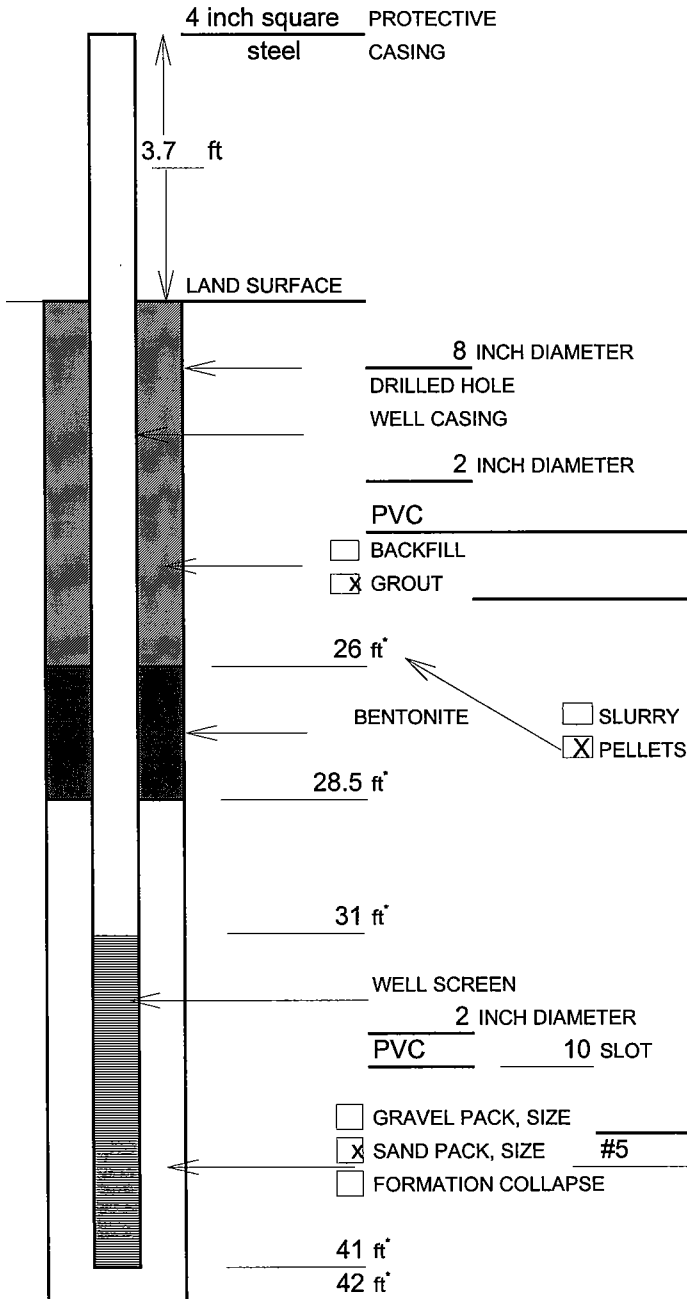
WATER REMOVED DURING DEVELOPMENT
STATIC DEPTH TO WATER see develop. log
GROUT 7.50% BENTONITE VOLUME

METHOD OF PLACEMENT Tremie
GRAVEL/SAND VOLUME 350 POUNDS
METHOD OF PLACEMENT Gravity

PREPARED BY: Stephen Zayko

SECOR

WELL CONSTRUCTION LOG



* DEPTH BELOW LAND SURFACE

MEASURING POINT IS TOP OF WELL CASING
UNLESS NOTED OTHERWISE

PROJECT Chemical Land Holdings
PROJECT # W0021-001-22
WELL SW1-4
TOWN/CITY & STATE Painsville, OH

LAND SURFACE ELEVATION AND DATUM 617.66'
☒ SURVEYED ☐ ESTIMATED

INSTALLATION DATE(S):
START DATE & TIME 9/23/97 / 18:35
COMPLETION DATE & TIME 9/24/97 / 15:30

DRILLING METHOD 4 1/4" Hollow Stem Auger
DRILLING CONTRACTOR Bowser Morner
DRILLING FLUID None

DEVELOPMENT TECHNIQUE(S) AND DATE(S)

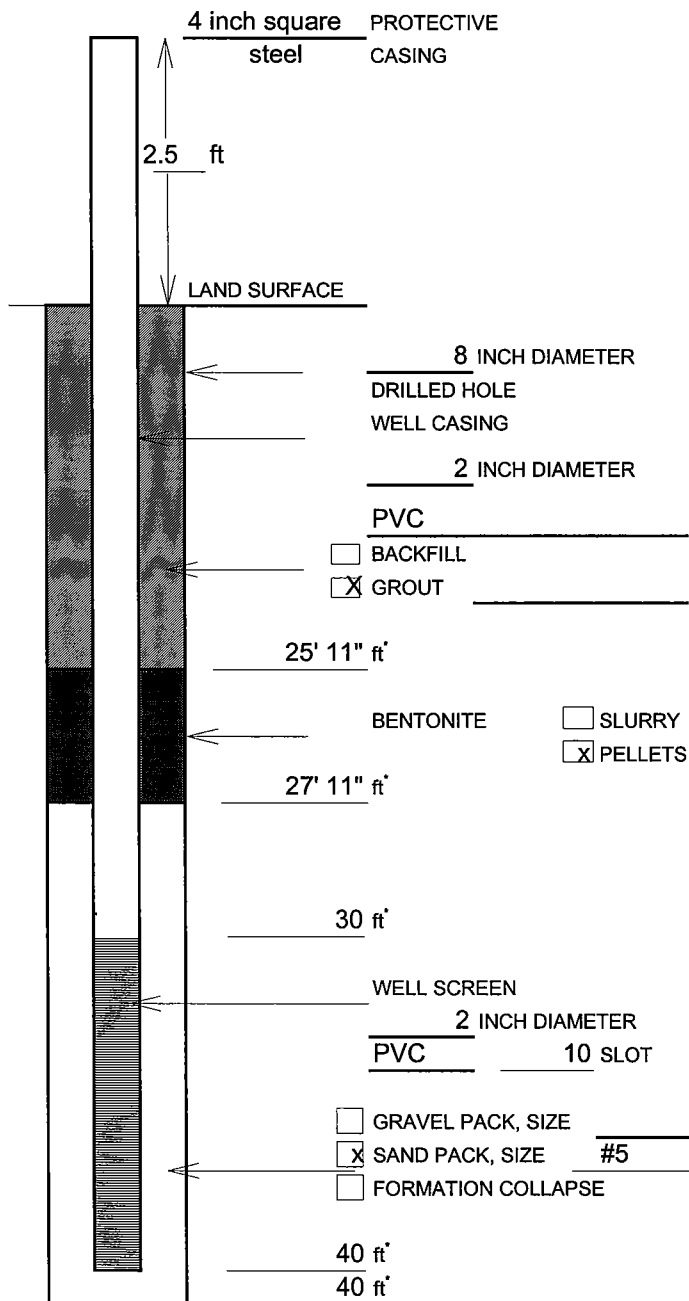
WATER REMOVED DURING DEVELOPMENT _____
STATIC DEPTH TO WATER see develop. log
GROUT 20% BENTONITE VOLUME 50

METHOD OF PLACEMENT tremmie
GRAVEL/SAND VOLUME 375 POUNDS
METHOD OF PLACEMENT gravity

PREPARED BY: Stephen Zayko

SECOR

WELL CONSTRUCTION LOG



* DEPTH BELOW LAND SURFACE

MEASURING POINT IS TOP OF WELL CASING
UNLESS NOTED OTHERWISE

PROJECT Chemical Land Holdings
PROJECT # W0021-001-23
WELL SW1-5
TOWN/CITY & STATE Painsville, OH

LAND SURFACE ELEVATION AND DATUM 622.74'
☒ SURVEYED ☐ ESTIMATED

INSTALLATION DATE(S):
START DATE & TIME 9/17/97
COMPLETION DATE & TIME _____

DRILLING METHOD 4 1/4" Hollow Stem Auger
DRILLING CONTRACTOR Bowser Morner
DRILLING FLUID None

DEVELOPMENT TECHNIQUE(S) AND DATE(S)

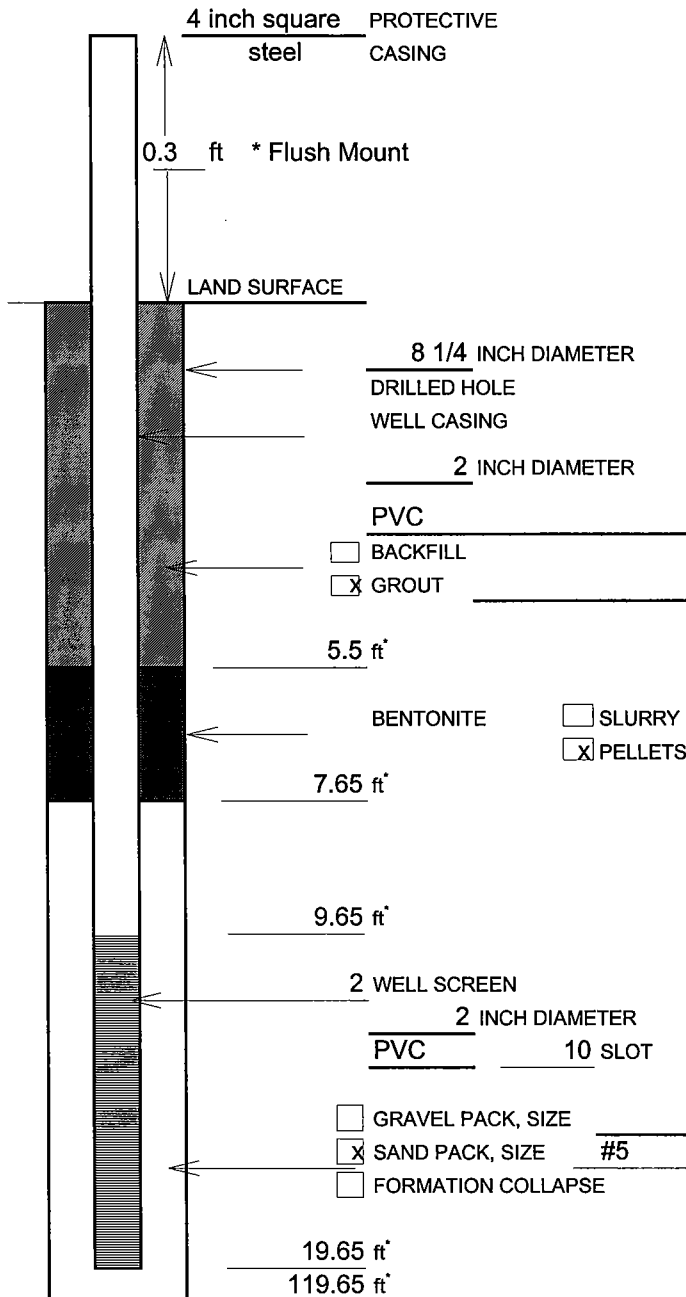
WATER REMOVED DURING DEVELOPMENT _____
STATIC DEPTH TO WATER see develop. log
GROUT 7% BENTONITE VOLUME 50 gal

METHOD OF PLACEMENT tremmie
GRAVEL/SAND VOLUME 350 POUNDS
METHOD OF PLACEMENT gravity

PREPARED BY: Stephen Zayko

SECOR

WELL CONSTRUCTION LOG



* DEPTH BELOW LAND SURFACE

MEASURING POINT IS TOP OF WELL CASING
UNLESS NOTED OTHERWISE

PROJECT Chemical Land Holdings
PROJECT # W0021-001-24
WELL SW1-6
TOWN/CITY & STATE Painsville, OH

LAND SURFACE ELEVATION AND DATUM 618.98'
☒ SURVEYED ☐ ESTIMATED

INSTALLATION DATE(S):
START DATE & TIME 9/30/97 / 10:05
COMPLETION DATE & TIME 9/30/97

DRILLING METHOD 4 1/4" Hollow Stem Auger
DRILLING CONTRACTOR Bowser Morner
DRILLING FLUID None

DEVELOPMENT TECHNIQUE(S) AND DATE(S)

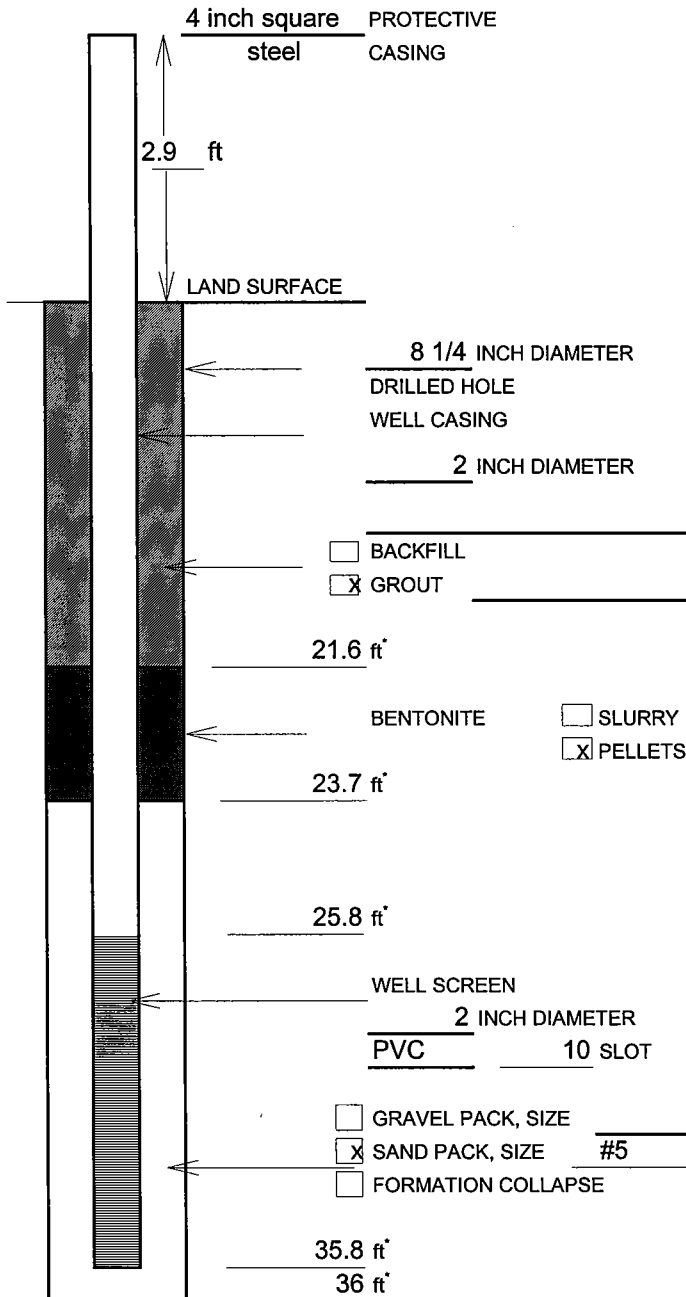
WATER REMOVED DURING DEVELOPMENT
STATIC DEPTH TO WATER see develop. log
GROUT _____ % BENTONITE VOLUME _____

METHOD OF PLACEMENT Through Augers
GRAVEL/SAND VOLUME 350 POUNDS
METHOD OF PLACEMENT _____

PREPARED BY: Rueben Kent

SECOR

WELL CONSTRUCTION LOG



* DEPTH BELOW LAND SURFACE

MEASURING POINT IS TOP OF WELL CASING
UNLESS NOTED OTHERWISE

PROJECT Chemical Land Holdings
PROJECT # W0021-001-34
WELL SW1-7
TOWN/CITY & STATE Painsville, OH

LAND SURFACE ELEVATION AND DATUM 618.25'
☒ SURVEYED ☐ ESTIMATED

INSTALLATION DATE(S):
START DATE & TIME 10/1/97 / 13:30
COMPLETION DATE & TIME 10/1/97

DRILLING METHOD 4 1/4" Hollow Stem Auger
DRILLING CONTRACTOR Bowser Morner
DRILLING FLUID None

DEVELOPMENT TECHNIQUE(S) AND DATE(S)

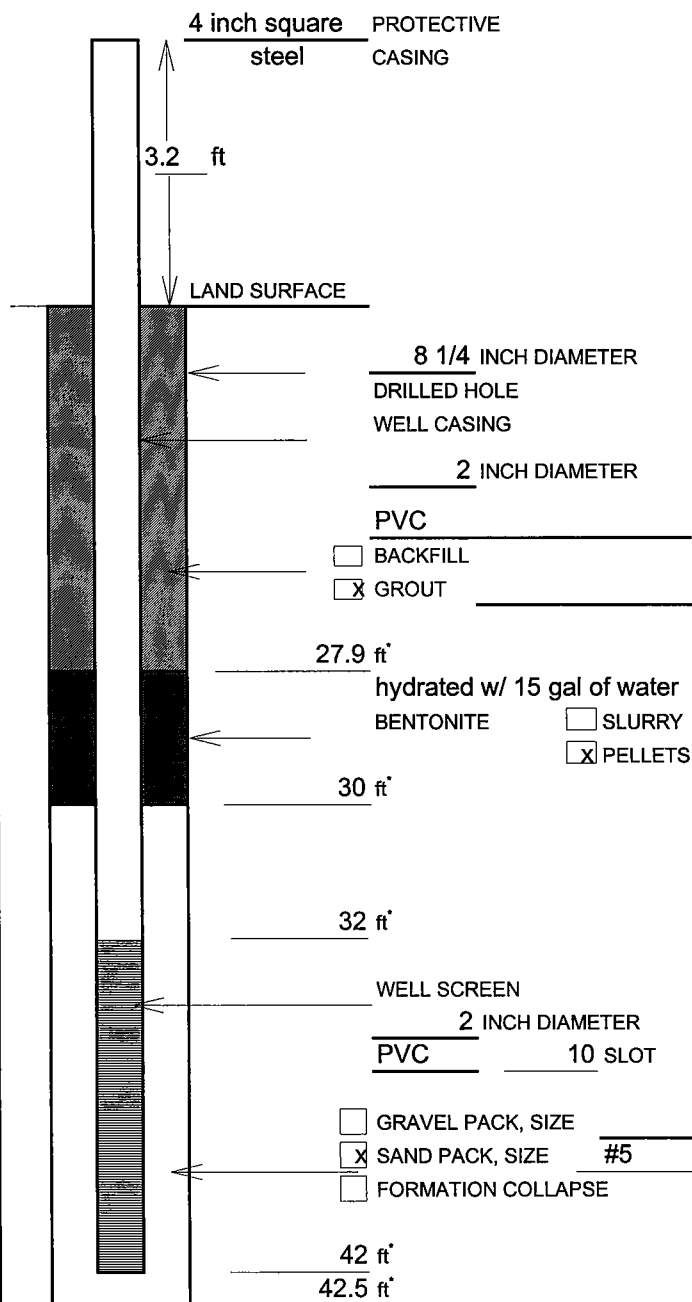
WATER REMOVED DURING DEVELOPMENT
STATIC DEPTH TO WATER see develop. log
GROUT % BENTONITE VOLUME

METHOD OF PLACEMENT Through Auger
GRAVEL/SAND VOLUME 350 POUNDS
METHOD OF PLACEMENT

PREPARED BY: Rueben Kent

SECOR

WELL CONSTRUCTION LOG



* DEPTH BELOW LAND SURFACE

MEASURING POINT IS TOP OF WELL CASING
UNLESS NOTED OTHERWISE

PROJECT Chemical Land Holdings
PROJECT # W0021-001-19
WELL SW2-1
TOWN/CITY & STATE Painsville, OH

LAND SURFACE ELEVATION AND DATUM 613.32'
☒ SURVEYED ☐ ESTIMATED

INSTALLATION DATE(S):
START DATE & TIME 10/7/97 / 13:00
COMPLETION DATE & TIME 10/7/97 / 18:00

DRILLING METHOD 4 1/4" Hollow Stem Auger
DRILLING CONTRACTOR Bowser Morner
DRILLING FLUID None

DEVELOPMENT TECHNIQUE(S) AND DATE(S)

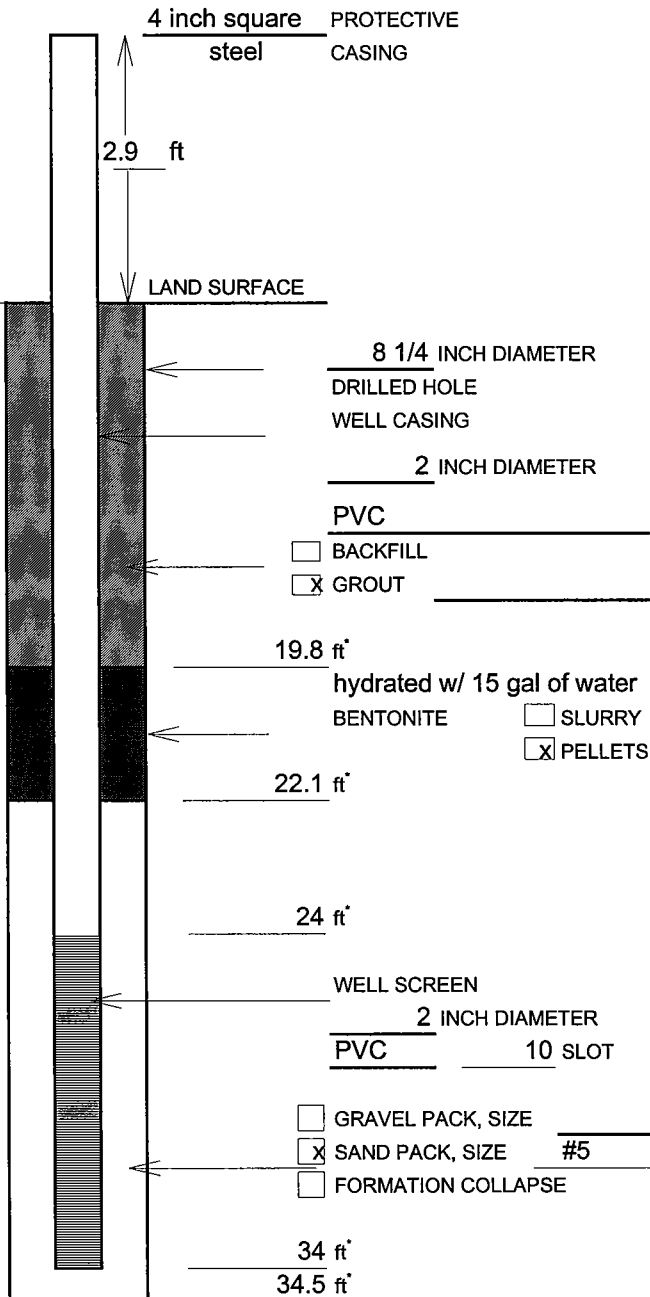
WATER REMOVED DURING DEVELOPMENT
STATIC DEPTH TO WATER see develop. log
GROUT % BENTONITE VOLUME

METHOD OF PLACEMENT Through Augers
GRAVEL/SAND VOLUME 350 POUNDS
METHOD OF PLACEMENT

PREPARED BY: Rueben Kent

SECOR

WELL CONSTRUCTION LOG



* DEPTH BELOW LAND SURFACE

MEASURING POINT IS TOP OF WELL CASING
UNLESS NOTED OTHERWISE

PROJECT	Chemical Land Holdings
PROJECT #	W0021-001-19
WELL	SW2-2
TOWN/CITY & STATE	Painsville, OH

LAND SURFACE ELEVATION AND DATUM 613.29'
☒ SURVEYED ☐ ESTIMATED

INSTALLATION DATE(S):

START DATE & TIME	10/7/97 / 7:45
COMPLETION DATE & TIME	10/7/97 / 12:30

DRILLING METHOD 4 1/4" Hollow Stem Auger
 DRILLING CONTRACTOR Bowser Morner
 DRILLING FLUID None

DEVELOPMENT TECHNIQUE(S) AND DATE(S)

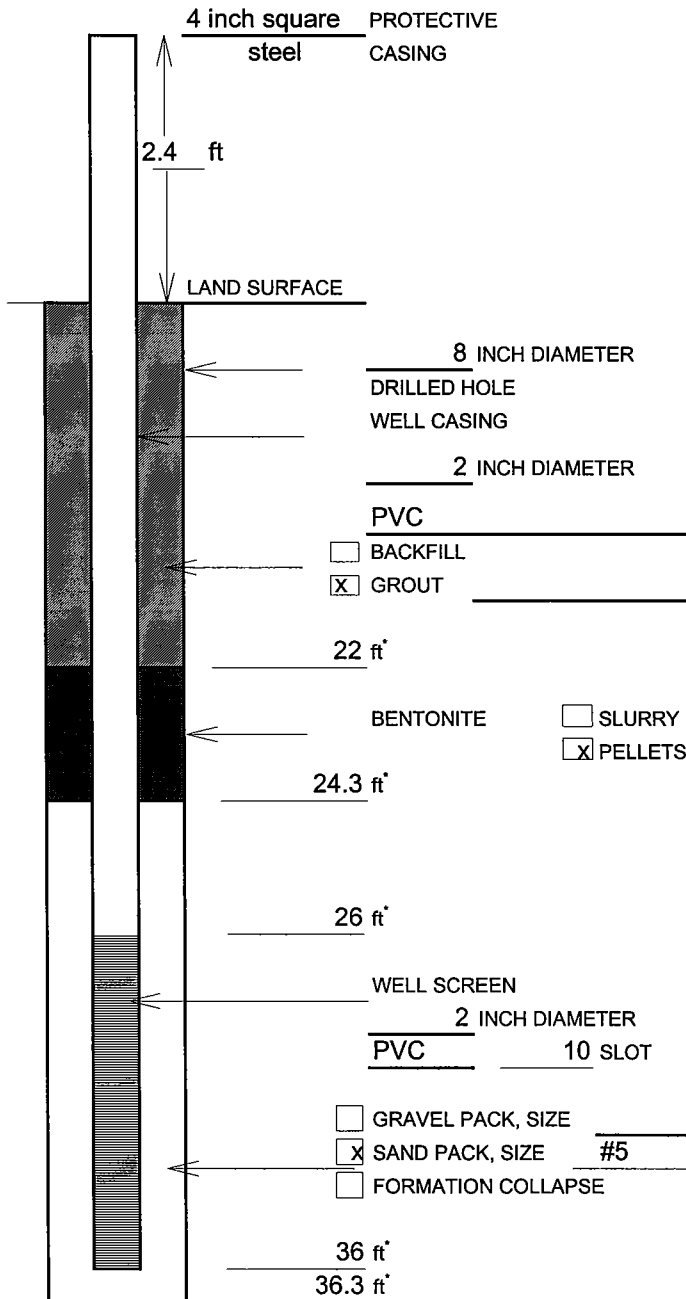
WATER REMOVED DURING DEVELOPMENT _____
 STATIC DEPTH TO WATER _____
 GROUT % BENTONITE VOLUME

METHOD OF PLACEMENT	<u>Gravity</u>
GRAVEL/SAND VOLUME	<u>400</u> POUNDS
METHOD OF PLACEMENT	<u>Gravity</u>

PREPARED BY: Rueben Kent

SECOR

WELL CONSTRUCTION LOG



PROJECT Chemical Land Holdings
 PROJECT # W0021-001-19
 WELL SW4-1
 TOWN/CITY & STATE Painsville, OH

LAND SURFACE ELEVATION AND DATUM 599.96'
☒ SURVEYED ☐ ESTIMATED

INSTALLATION DATE(S):
 START DATE & TIME 9/10/97
 COMPLETION DATE & TIME 9/11/97

DRILLING METHOD 4 1/4" Hollow Stem Auger
 DRILLING CONTRACTOR Bowser Morner
 DRILLING FLUID None

DEVELOPMENT TECHNIQUE(S) AND DATE(S)

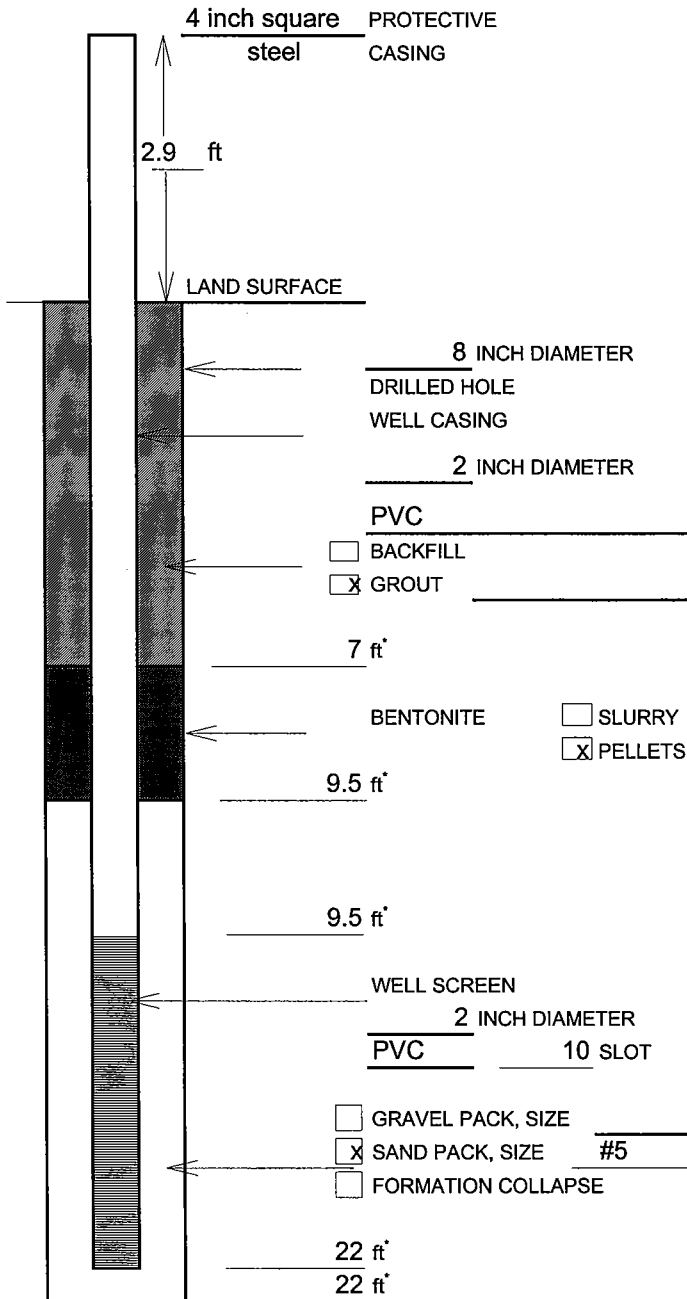
WATER REMOVED DURING DEVELOPMENT _____
 STATIC DEPTH TO WATER see develop. log
 GROUT 6% BENTONITE VOLUME 80 gal

METHOD OF PLACEMENT tremie
 GRAVEL/SAND VOLUME 250 POUNDS
 METHOD OF PLACEMENT Gravity

PREPARED BY: Stephen Zayko

SECOR

WELL CONSTRUCTION LOG



* DEPTH BELOW LAND SURFACE

MEASURING POINT IS TOP OF WELL CASING
UNLESS NOTED OTHERWISE

PROJECT Chemical Land Holdings
PROJECT # W0021-001-31
WELL SW4-4
TOWN/CITY & STATE Painsville, OH

LAND SURFACE ELEVATION AND DATUM 607.39'
☒ SURVEYED ☐ ESTIMATED

INSTALLATION DATE(S):
START DATE & TIME 9/15/97 / 15:25
COMPLETION DATE & TIME _____

DRILLING METHOD 4 1/4" Hollow Stem Auger
DRILLING CONTRACTOR Bowser Morner
DRILLING FLUID None

DEVELOPMENT TECHNIQUE(S) AND DATE(S)

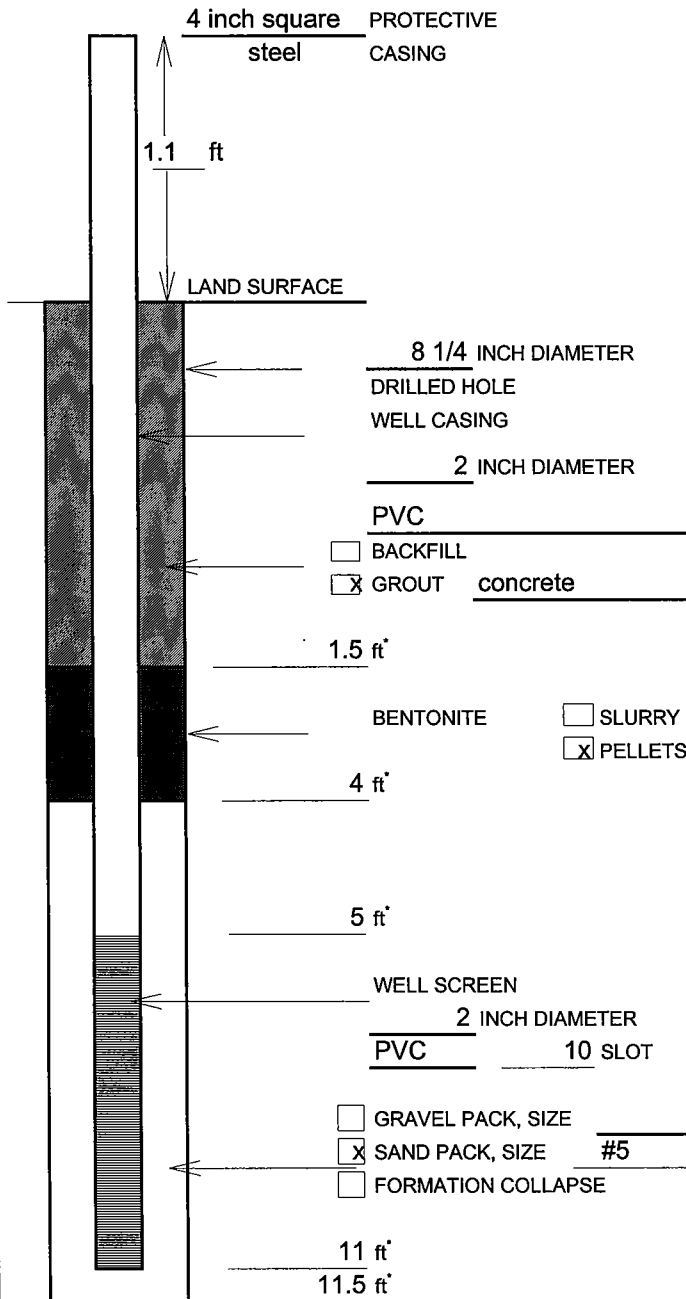
WATER REMOVED DURING DEVELOPMENT
STATIC DEPTH TO WATER see development log
GROUT 6% BENTONITE VOLUME 16 gal

METHOD OF PLACEMENT Gravity
GRAVEL/SAND VOLUME 500 POUNDS
METHOD OF PLACEMENT Gravity

PREPARED BY: Stephen Zayko

SECOR

WELL CONSTRUCTION LOG



* DEPTH BELOW LAND SURFACE

MEASURING POINT IS TOP OF WELL CASING
UNLESS NOTED OTHERWISE

PROJECT Chemical Land Holdings
PROJECT # W0021-001-32
WELL SW7-2
TOWN/CITY & STATE Painsville, OH

LAND SURFACE ELEVATION AND DATUM 580.08'
☒ SURVEYED ☐ ESTIMATED

INSTALLATION DATE(S):
START DATE & TIME 10/14/97 / 10:40
COMPLETION DATE & TIME 10/14/97 / 13:00

DRILLING METHOD 4 1/4" Hollow Stem Auger
DRILLING CONTRACTOR Bowser Morner
DRILLING FLUID None

DEVELOPMENT TECHNIQUE(S) AND DATE(S)

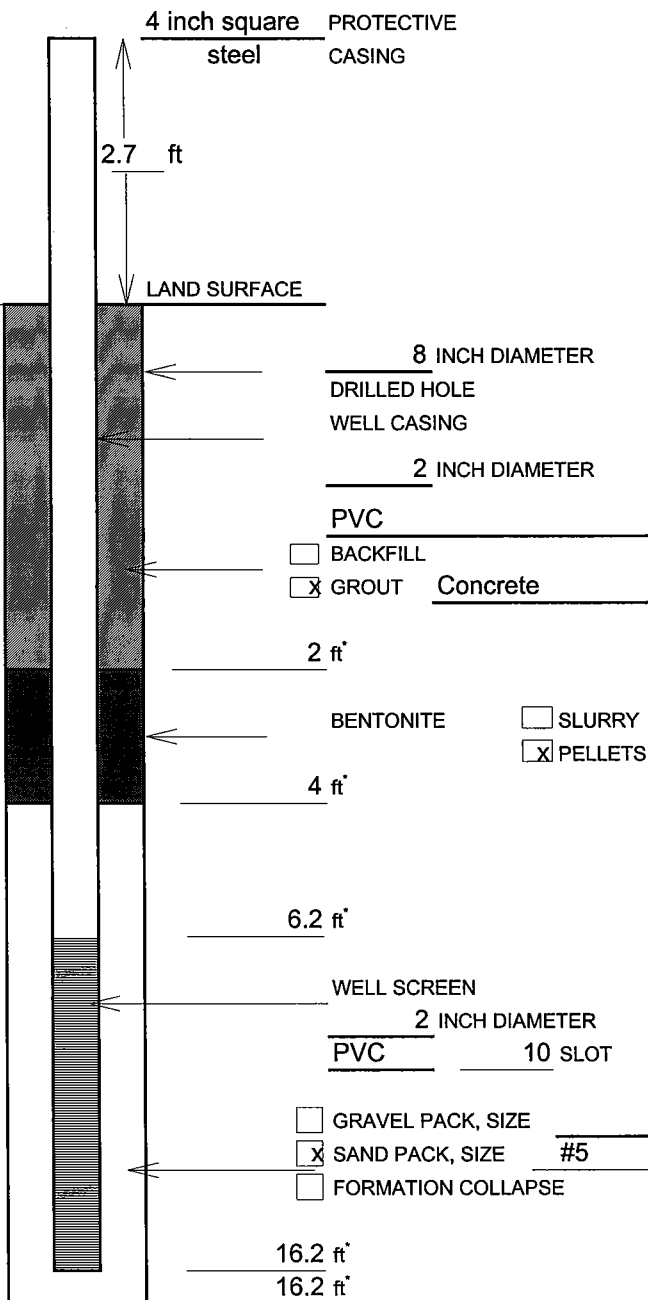
WATER REMOVED DURING DEVELOPMENT
STATIC DEPTH TO WATER see develop. log
GROUT NA % BENTONITE VOLUME NA

METHOD OF PLACEMENT Gravity
GRAVEL/SAND VOLUME 250 POUNDS
METHOD OF PLACEMENT Gravity

PREPARED BY: Rueben Kent

SECOR

WELL CONSTRUCTION LOG



* DEPTH BELOW LAND SURFACE

MEASURING POINT IS TOP OF WELL CASING
UNLESS NOTED OTHERWISE

PROJECT	Chemical Land Holdings
PROJECT #	W0021-001-33
WELL	SW7-3
TOWN/CITY & STATE	Painsville, OH

LAND SURFACE ELEVATION AND DATUM 606.02'
☒ SURVEYED ☐ ESTIMATED

INSTALLATION DATE(S):
START DATE & TIME 9/10/97 /12:05
COMPLETION DATE & TIME 9/10/97 / 17:05

DRILLING METHOD 4 1/4" Hollow Stem Auger
 DRILLING CONTRACTOR Bowser Morner
 DRILLING FLUID None

DEVELOPMENT TECHNIQUE(S) AND DATE(S)

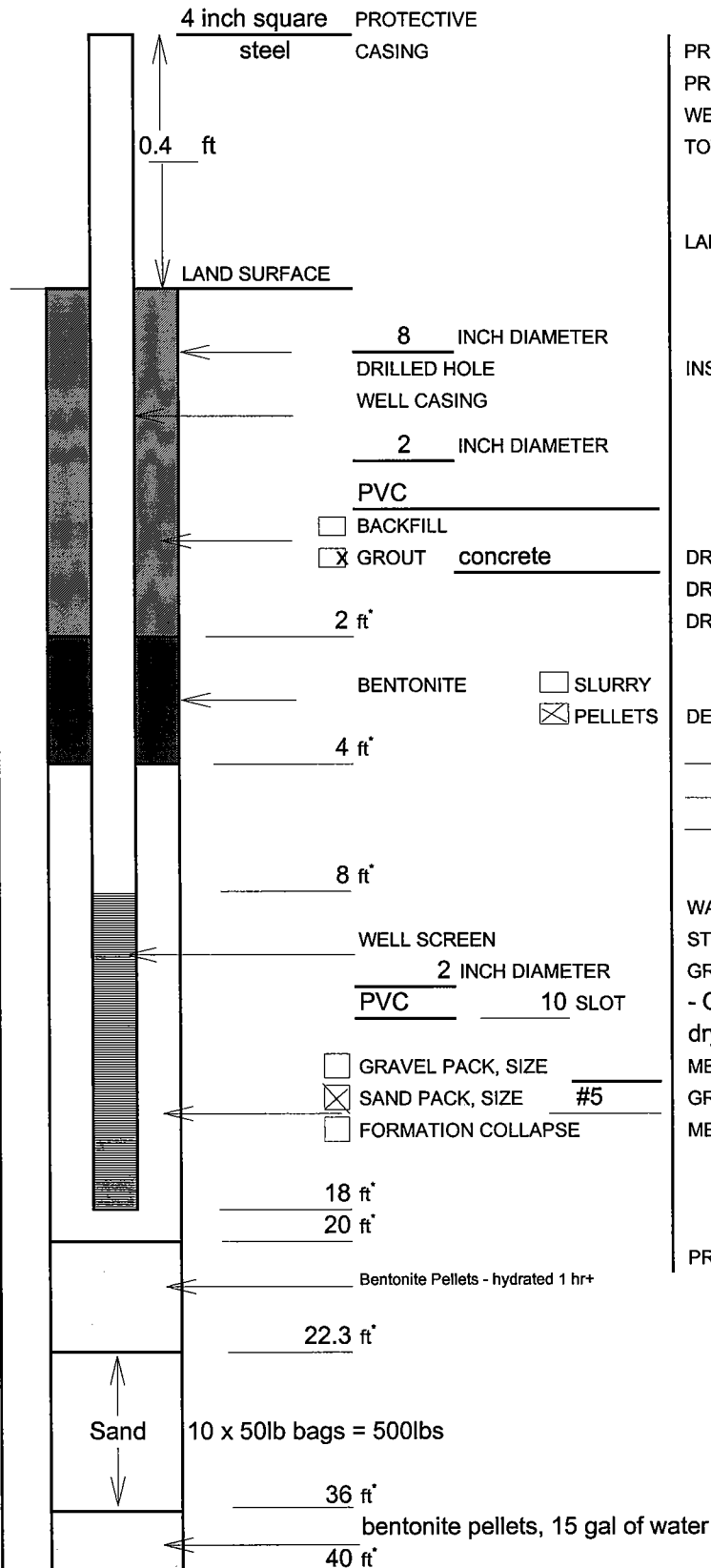
WATER REMOVED DURING DEVELOPMENT		_____
STATIC DEPTH TO WATER		see develop. log
GROUT	NA %	BENTONITE VOLUME NA
		360 lbs cement

METHOD OF PLACEMENT	<u>gravity</u>
GRAVEL/SAND VOLUME	<u>400</u> POUNDS
METHOD OF PLACEMENT	<u>gravity</u>

PREPARED BY: Stephen Zayko

SECOR

WELL CONSTRUCTION LOG



PROJECT Chemical Land Holdings
PROJECT # W0021-001-33
WELL SW7-4
TOWN/CITY & STATE Painsville, OH

LAND SURFACE ELEVATION AND DATUM 611.34'
☒ SURVEYED ☐ ESTIMATED

INSTALLATION DATE(S):
START DATE & TIME 9/8/1997 /14:45
COMPLETION DATE & TIME 9/10/97 / 11:00

DRILLING METHOD 4 1/4" Hollow Stem Auger
DRILLING CONTRACTOR Bowser Morner
DRILLING FLUID None

DEVELOPMENT TECHNIQUE(S) AND DATE(S)

WATER REMOVED DURING DEVELOPMENT
STATIC DEPTH TO WATER see develop. log
GROUT 0% BENTONITE VOLUME 1180 lbs
- Quik Crete
dry mix concrete (90 lb bags)
METHOD OF PLACEMENT gravity
GRAVEL/SAND VOLUME 450 POUNDS
METHOD OF PLACEMENT gravity

PREPARED BY: Stephen Zayko

APPENDIX B

SOIL SAMPLING FORMS

STUDY AREA 1

Painesville, Ohio

Sample Point Description

QA/QC samples collected? NO

Sample collector (s) Heshen E. Ambo

Stephen Zayko

Painesville, Ohio

Sample Point Description _____

Equipment Used B-61 Drilling

QA/QC samples collected? no

Comments

Sample collector (s) Stephen Taylor

Painesville, Ohio

Sample collector (s) Stephen Zausko

SOIL SAMPLING RECORD

Painesville Works Site

Painesville, Ohio

Project No. W0021-001-23 Project Location SA1 - ASR
 Sample No. SBI-2 Date 9/23/97
 Sample Point Description _____

SAMPLE COLLECTION

Equipment Used B61 Drill Rig

QA/QC samples collected? yes - Dups, MS/MSD

Sample No.	Depth	Type of Material	Container Size	Analysis Requested
SBI-2	2-74	SOIL	1-32oz, 2-4oz	*
DUP 7	(2-74)	SOIL	1-32oz, 2-4oz	*
SBI-2 MS/MSD	2-74	SOIL	1-32oz, 2-4oz	*
* TAL Metals, TCL VOCs, TCL SVOCs, TCL PESTS, TCL PCBs, Asbestos, Hx Chrome, TOC				

Comments _____

Sample collector (s) Stephen Zayko

Painesville, Ohio

Sample Point Description

Equipment Used B61 Drill Rig

QA/QC samples collected? No

Sample No.	Depth	Type of Material	Container Size	Analysis Requested
SBI-3	2-71'	Soil	1-4oz, 2-16oz	*
*TAL Metals, TCL PCBs, TCL PESTS, TCL TCL VOCs, TCL SVOCs, hex Chrome, TOC, Asbestos				

Comments

Sample collector (s)

Stephen Zaffko

Painesville, Ohio

Sample Point Description	Sample Point Number	Sample Point Location	Sample Point Date	Sample Point Time	Sample Point Type	Sample Point Status	Sample Point Notes
Sample Point 1	1	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 2	2	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 3	3	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 4	4	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 5	5	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 6	6	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 7	7	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 8	8	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 9	9	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 10	10	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 11	11	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 12	12	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 13	13	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 14	14	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 15	15	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 16	16	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 17	17	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 18	18	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 19	19	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 20	20	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 21	21	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 22	22	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 23	23	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 24	24	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 25	25	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 26	26	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 27	27	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 28	28	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 29	29	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 30	30	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 31	31	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 32	32	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 33	33	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 34	34	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 35	35	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 36	36	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 37	37	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 38	38	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 39	39	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 40	40	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 41	41	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 42	42	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 43	43	1000	10/10/2010	10:00	1000	1000	1000
Sample Point 44	44						

QA/QC samples collected? no

Sample collector (s) Stephen Fazio

Stephen Zajko

Painesville, Ohio

Sample collector (s) Teresa Sauer / Stephen Zayko

SOIL SAMPLING RECORD

Painesville Works Site

Painesville, Ohio

Project No. W00 21-001-020 Project Location Study Area 1

Sample No. SBI-5 Date 8/28/97

Sample Point Description North of railroad tracks, south of fence line, ~190' east of telephone pole in front of gate to S.A. 5 & 6

SAMPLE COLLECTION

Equipment Used 3" hand auger

QA/QC samples collected? NO

Sample No.	Depth	Type of Material	Container Size	Analysis Requested
SBI-5	0-2'	Soil	16oz	TCL METALS, TOC, HEX, CR, ACETONE, TCL PCBs, PESTs, SVOCs
SBI-5	0-2'	Soil	16oz	
SBI-5	0-2'	Soil	4oz	
				TCL VOCs

Comments No odor or staining observed

Sample collector (s) Teresa C. Sauer

SOIL SAMPLING RECORD

Painesville Works Site

Painesville, Ohio

Project No. W0021-001-19 Project Location Study Area 1
 Sample No. SBI-6 Date 9/3/97
 Sample Point Description 125 Ft FROM CORNER OF FENCE LINE
225° FROM SAME CORNER PAINTED ORANGE 1 Ft. FROM GROUND

SAMPLE COLLECTION

Equipment Used 3" hand auger

QA/QC samples collected? NO

Sample No.	Depth	Type of Material	Container Size	Analysis Requested
SBI-6	0-2'	soil	16oz glass	TAL METALS TOC, ASBESTOS, HEX CO, TEL SVOCs, PCBs, PESTS
SBI-6	0-2'	soil	16oz glass	
SBI-6	0-2'	soil	4oz glass	
				TCL VOCs

Comments NO ODOR NO STAINING

Sample collector (s) Teresa Szuper
STEPHEN ZAYKO

SOIL SAMPLING RECORD

Painesville Works Site

Painesville, Ohio

Project No. W0021-001-20 Project Location STUDY AREA 1

Sample No. SBI-7 Date 8/28/97

Sample Point Description North of railroad tracks, south of fence line; 20 feet west of fence line off CLH & PVS property

SAMPLE COLLECTION

Equipment Used 3" hand auger

QA/QC samples collected? NO

Sample No.	Depth	Type of Material	Container Size	Analysis Requested
SBI-7	0-2'	SOIL	16 oz	TCL SVOCs, PCBs, PEST, TBC, HEX CR, TAL, METALS, PESTS, TDS
SBI-7	0-2'	SOIL	16 oz	
SBI-7	0-2'	SOIL	4 oz	
				TCL VOCs

Comments No odor or staining observed

Sample collector (s) Teresa C. Szuper